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THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

HOUSE OF REPRESENTATIVES

**OFFSHORE PETROLEUM AMENDMENT (GREENHOUSE GAS
STORAGE) BILL 2008**

**OFFSHORE PETROLEUM (ANNUAL FEES) AMENDMENT
(GREENHOUSE GAS STORAGE) BILL 2008**

**OFFSHORE PETROLEUM (REGISTRATION FEES) AMENDMENT
(GREENHOUSE GAS STORAGE) BILL 2008**

**OFFSHORE PETROLEUM (SAFETY LEVIES) AMENDMENT
(GREENHOUSE GAS STORAGE) BILL 2008**

EXPLANATORY MEMORANDUM

(Circulated by authority of the Minister for Resources and Energy,
the Honourable Martin Ferguson AM, MP)

Financial Impact Statement

Funding for the development and implementation of the regulatory framework has been provided and no additional funding is sought for this purpose. Fees will be charged for greenhouse gas titles to recover the costs of day-to-day administration.

Regulatory Impact Statement

The Regulatory Impact Statement is provided in Attachment A.

OFFSHORE PETROLEUM AMENDMENT (GREENHOUSE GAS STORAGE) BILL 2008

OUTLINE

1. The Offshore Petroleum Amendment (Greenhouse Gas Storage) Bill 2008 ('the Bill') will amend the *Offshore Petroleum Act 2006* ('principal Act') to establish a system of offshore titles, similar to the offshore petroleum titles that already exist under the principal Act, that will authorise the transportation by pipeline and injection and storage of greenhouse gas substances in deep geological formations under the seabed. The Bill will also make changes to the existing regime of petroleum titles that are needed in order to accommodate the new kinds of activity being authorised by the Act. Petroleum and greenhouse gas operations will in many respects be similar and the resources of the seabed and subsoil that the two categories of title-holders will seek to exploit have much in common. Each form of activity will have the potential to impact on the other, both beneficially and detrimentally. The Bill therefore provides for regulatory decisions made in respect of each form of activity to take into account potential impacts on the other.
2. The adjustments made by the Bill to the rights and obligations attached to petroleum titles will not apply to petroleum titles in existence at the date of commencement of the relevant provisions of the Bill. Nor will they apply to subsequent titles in the same series as existing titles. In addition, when decisions are made in relation to approval of greenhouse gas-related activities, those petroleum titles will have the protection of a 'no significant adverse impact' test.
3. A greenhouse gas injection licence will authorise the injection and storage of a 'greenhouse gas substance'. For practical purposes, when the amendments commence, 'greenhouse gas substance' will mean carbon dioxide, together with any substances incidentally derived from the capture, transportation or injection processes, with the permitted or required addition of chemical detection agents. There is a power by regulation to extend the meaning of 'greenhouse gas substance' to include other greenhouse gases. This regulation-making power is not expected to be used until such time as the 1996 Protocol to the London Dumping Convention is amended to permit geological storage of those other greenhouse gases.
4. The new titles established by the Bill correspond generally to the existing petroleum titles. The new greenhouse gas titles and the petroleum titles they correspond to are:
 - a greenhouse gas assessment permit (petroleum exploration permit);
 - a greenhouse gas holding lease (petroleum retention lease);
 - a greenhouse gas injection licence (petroleum production licence);
 - a greenhouse gas search authority (special prospecting authority);

a greenhouse gas special authority (access authority);

an infrastructure licence can now be obtained for greenhouse gas-related activities.

5. The principal Act, as amended by the Bill, will continue to apply only in the Commonwealth offshore jurisdiction. The new greenhouse gas titles will therefore be located in the area between the outer limits of the State and Northern Territory (3 nautical mile) coastal waters and the outer limit of the Australian continental shelf.

SCHEDULE 1—AMENDMENTS RELATING TO GREENHOUSE GAS STORAGE

6. Schedule 1 inserts into the Offshore Petroleum Act the new provisions that will provide for the release of offshore acreage over which greenhouse gas titles may be obtained, establish the system of titles that will authorise title-holders to engage in greenhouse gas related operations and confer on the responsible Commonwealth Minister regulatory powers in relation to those titles and those activities. New categories of project inspectors and OHS inspectors are also established.
7. Schedule 1 also contains a substantial number of provisions that duplicate existing petroleum provisions relating to administrative, regulatory and process matters, which are adapted to apply to greenhouse gas titles and operations. In most cases, the adaptation extends only to changing the names of the offshore titles and the name of the regulator, with the responsible Commonwealth Minister being substituted for the Joint Authority and Designated Authority, together with any necessary changes to cross-references. The intended effect is that the existing 'petroleum' provisions will simply be applied to greenhouse gas titles, title-holders and operations. However, for ease of reading, the drafting approach taken has been to reproduce the provisions in their entirety.
8. Schedule 1 also adds some entirely new provisions, which will apply to post-commencement petroleum titles and operations under those titles, and makes certain other amendments made necessary by the fact that the Act now provides for two systems of titles and two kinds of offshore operations.

NOTES ON CLAUSES

Item 1 Change to long title

9. Item 1 changes the long title of the principal Act to 'An Act about petroleum exploration and recovery, and the injection and storage of greenhouse gas substances, in offshore areas, and for other purposes'.

Item 2 Section 1 Change to short title

10. Item 2 amends section 1 to change the short title of the principal Act to 'the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*'.

Item 3 to 5 Section 3 Simplified outline

11. Items 3, 4 and 5 amend the simplified outline of the Act in section 3.

Definitions

12. A clause note is not provided for a self-explanatory change or addition to section 6. Nor is a clause note provided where the term is defined in a later provision.

Item 7 Section 6 Definition of approved

13. Item 7 changes the definition of ***approved*** to allow for the fact that approvals will now be given by two different decision-makers under the Act. In the case of the petroleum provisions, approvals will be given by the Designated Authorities, who will continue to have the day-to-day administration of the petroleum provisions of Act. In the case of the greenhouse gas provisions, approvals will be given by the responsible Commonwealth Minister.

Item 8 Section 6 Approved site plan

14. Item 8 inserts a definition of ***approved site plan***. The site plan is the core regulatory document for each greenhouse gas injection and storage project and will form the basis for the day-to-day regulatory interaction between the injection licensee and the regulator (the delegate of the responsible Commonwealth Minister). The site plan will keep the regulator informed, at an appropriate level of detail, of the geological attributes or features of the storage formation, as they are currently known, current and proposed injection and storage operations, the results of ongoing monitoring and verification programs and predictions as to the short, medium and long term behaviour and fate of the greenhouse gas in the identified storage formation and associated geological formation(s).

Item 11 Section 6 Declared exploration permit

15. A ***declared exploration permit*** is a ***post-commencement (petroleum) exploration permit*** in respect of which the responsible Commonwealth Minister has determined under proposed section 79B that there is a significant risk of petroleum operations having a significant adverse impact on greenhouse gas operations. The holder of a declared exploration permit requires the responsible Commonwealth Minister's approval in order to carry out ***key petroleum operations***.

Item 12 Section 6 Declared greenhouse gas facility

16. The concept of a ***declared greenhouse gas facility*** is distinct from that of the 'declared' petroleum titles to which items 11, 13 and 14 refer. A ***declared greenhouse gas facility*** is a structure or plant in an injection licence area used for greenhouse gas-related operations and which can be constructed and operated under the authority of the injection licence. No infrastructure licence is required. This definition is part of a group of definitions designed to permit flexibility for an

injection licensee in deciding on the configuration of the structures and plant that are used in injection and storage operations.

Item 13 Section 6 Declared production licence

17. A ***declared production licence*** is a ***post-commencement (petroleum) production licence*** in respect of which the responsible Commonwealth Minister has determined under proposed section 138B that there is a significant risk of petroleum operations having a significant adverse impact on greenhouse gas operations. The holder of a declared production licence requires the responsible Commonwealth Minister's approval in order to carry out ***key petroleum operations***.

Item 14 Section 6 Declared retention lease

18. A ***declared retention lease*** is a ***post-commencement (petroleum) retention lease*** in respect of which the responsible Commonwealth Minister has determined under proposed section 114B that there is a significant risk of petroleum operations having a significant adverse impact on greenhouse gas operations. The holder of a declared retention lease requires the responsible Commonwealth Minister's approval in order to carry out ***key petroleum operations***.

Item 24 Section 6 Greenhouse gas facility line

19. A greenhouse gas facility line is a pipe, or system of pipes, for carrying a greenhouse gas substance that is part of a ***declared greenhouse gas facility***. The consequence of a pipe for greenhouse gas being part of a ***declared greenhouse gas facility*** is that the pipe is not required to be covered by a greenhouse gas-related pipeline licence or by an infrastructure licence. This definition is part of a group of definitions designed to permit flexibility for an injection licensee in deciding on the configuration of the structures and plant that are used in injection and storage operations.

Item 28 Section 6 Greenhouse gas infrastructure line

20. A ***greenhouse gas infrastructure line*** is a pipe, or system of pipes, for carrying a greenhouse gas substance that is part of an infrastructure facility. An infrastructure facility is a facility that is required to be licensed under an infrastructure licence, because it is outside the relevant injection licence area and so is not covered by the injection licence. A greenhouse gas-related pipeline licence does not have to be obtained in order to operate a ***greenhouse gas infrastructure line***. There is no limitation on the length of a ***greenhouse gas infrastructure line***. — It does not have to be structurally integral to the infrastructure facility, other than being joined at an entry or exit flange. Whether a pipeline licence is required in a particular case is controlled by the responsible Commonwealth Minister via the discretion whether to declare a point on the pipe to be a ***terminal point*** under proposed section 14A. This definition is part of a group of definitions designed to permit flexibility for an injection licensee in deciding on the configuration of the structures and plant that are used in injection and storage operations.

Item 32 Section 6 Greenhouse gas injection line

21. A ***greenhouse gas injection line*** is a greenhouse gas pipe that is integral to an injection licensee's injection and storage operations in an injection licence area. It is not required to be covered by a greenhouse gas-related pipeline licence. Whether a pipeline licence is required in a particular case is controlled by the responsible Commonwealth Minister via the discretion whether to declare a point on the pipe to be a ***terminal point*** under proposed section 14A. This definition is part of a group of definitions designed to permit flexibility for an injection licensee in deciding on the configuration of the structures and plant that are used in injection and storage operations.

Item 33 Section 6 Greenhouse gas pipeline

22. A ***greenhouse gas pipeline*** must be licensed under a greenhouse gas-related pipeline licence. Whether a particular stretch of pipe needs to be separately licensed under a pipeline licence is controlled by the responsible Commonwealth Minister via the discretion whether to declare a point on the pipe to be a ***terminal point*** under proposed section 14A.

Item 39 Section 6 Greenhouse gas substance

23. For practical purposes, when the amendments made by this Bill commence, ***greenhouse gas substance*** will mean carbon dioxide, together with any substances incidentally derived from the capture, transportation, injection or storage processes, with the permitted or required addition of chemical detection agents to assist the tracing of the injected greenhouse gas substance.
24. There is a power by regulation to extend the meaning of ***greenhouse gas substance*** to include other greenhouse gases. This regulation-making power is not expected to be used until such time as the Protocol to the London Dumping Convention is amended to permit geological storage of those other greenhouse gases. In accordance with that Protocol, it will be an offence to add a waste substance or other matter to a ***greenhouse gas substance*** for the purposes of disposal.

Item 44 Section 6 Key greenhouse gas operation

25. ***Key greenhouse gas operations*** are greenhouse gas activities that it is considered may have impacts of some kind on petroleum operations under a present or future petroleum title under the Act. The impacts that these greenhouse gas operations may have on petroleum operations include not only impacts at the level of geological formations but also physical interference on the surface, for example where vessels may be in close proximity.

Item 45 Section 6 Key petroleum operation

26. Conversely, ***key petroleum operations*** are petroleum activities that it is considered may have impacts of some kind on greenhouse gas operations under a present or

future greenhouse gas title under the Act. The impacts that these petroleum operations may have on greenhouse gas operations include not only impacts at the level of geological formations but also physical interference on the surface, for example where vessels may be in close proximity.

Items 62 to 65 Section 6 Post-commencement petroleum titles

27. A ***post-commencement petroleum title*** is a petroleum exploration permit, petroleum retention lease or petroleum production licence in respect of which the initial exploration permit in the series is granted after the amendments made by the Bill commence.

Items 68 to 71 Section 6 Pre-commencement petroleum titles

28. A ***pre-commencement petroleum title*** is a petroleum exploration permit, petroleum retention lease or petroleum production licence that is in force at the time when the amendments made by this Bill commence, and any future petroleum title in the same series. This includes a petroleum retention lease granted to the holder of a life-of-field production licence that was itself a pre-commencement title.

Item 103 Section 13 Greenhouse gas activities at infrastructure facilities

29. The construction and operation of an infrastructure facility requires an infrastructure licence.
30. Section 13 at present defines ***infrastructure facility*** and sets out the petroleum activities that can be carried on at such a facility. Those permitted activities do not include exploring for, or recovering petroleum. (A petroleum production licensee does not require an infrastructure licence in order to construct and operate a petroleum production facility, or any other plant or structure used for the recovery of petroleum, in the production licence area.)
31. Item 103 adds a new subsection (3) to section 13 that sets out the greenhouse gas activities that can be carried out at an infrastructure facility. These activities do not include injecting a greenhouse gas substance (or any substance) into the seabed or subsoil.
32. The permitted activities do include activities preparatory to injecting a greenhouse gas substance into an identified greenhouse gas storage formation, for example, controlling the flow of a greenhouse gas substance into the injection well. They also include preparing a greenhouse gas substance for injection, for example, pumping, processing or compressing.
33. The significance of these examples that the subsection expressly provides is that all the activities and processes necessary to inject a greenhouse gas substance into an injection well, including giving it its final compression and pumping before it enters the well, and the plant and equipment (valves, etc) that control the flow of the

greenhouse gas substance into the injection well, can take place, or be located on, an infrastructure facility that is outside the injection licence area. As far as injection is concerned, all that the Act requires to happen in the injection licence area is that the greenhouse gas substance must enter the top of the injection well (the hole in the seabed) in the injection licence area. The injection well is required to be wholly within the injection licence area.

34. New subsection 13(4) provides that, for the purpose of new subsection (3), injection into an identified greenhouse gas storage formation is taken to take place at the top of the relevant well. This is stated expressly here for avoidance of doubt, as it is essential to the working of the section. The same principle is, however, implicit in other relevant greenhouse gas provisions.
35. Again, it is an intention of this provision that a greenhouse gas injection licensee have flexibility in deciding on the configuration of the structures and plant that are used in injection and storage operations. An injection licensee may wish to locate most of the project infrastructure outside the injection licence area. A licensed infrastructure facility may be used for that purpose.

Item 106 Section 14A Terminal point

36. It is the declaration of a terminal point on a pipeline that will determine whether a stretch of pipeline is required to be licensed under a ***greenhouse gas-related pipeline licence*** – see proposed section 187A for the grant of such licences.

Item 106 Section 14B Declared greenhouse gas facility

37. The concept of a ***declared greenhouse gas facility*** is distinct from that of the 'declared' petroleum titles to which items 11, 13 and 14 refer. A ***declared greenhouse gas facility*** is a structure or plant in an injection licence area used for greenhouse gas-related operations and which can be constructed and operated under the authority of the injection licence. No separate infrastructure licence is required.

Item 108 New subsection 15(2) Extended meaning of 'explore'

38. This clause extends the common, dictionary meaning of the word 'explore' in order to regulate all seismic surveying, seabed sampling surveys and various airborne remote sensing techniques such as gravity, magnetic and laser fluorimetry surveys that are designed to assist in locating storage formations. Such surveys can be carried out by various titleholders under the Act or by parties who are not themselves petroleum or greenhouse gas explorers. The surveys are performed by speculative survey companies (normally working under a special prospecting authority or search authority) who aim to sell the survey results to titleholders. Without this clause, there is doubt whether such speculative activities could be regulated under the Act.

Item 109 Section 15A Potential greenhouse gas storage formation

39. A ***potential greenhouse gas storage formation*** is a part of a geological formation that is suitable, with or without engineering enhancements, for the permanent storage of an amount (at least 100,000 tonnes) of a greenhouse gas substance. Section 249NA requires a greenhouse gas title-holder to notify the responsible Commonwealth Minister if the title-holder reasonably suspects that the title area contains a ***potential greenhouse gas storage formation***.

Item 109 Section 15B Eligible greenhouse gas storage formation

40. An ***eligible greenhouse gas storage formation*** is a part of a geological formation that is suitable, with or without engineering enhancements, for the permanent storage of a particular amount (at least 100,000 tonnes) of a particular greenhouse gas substance injected at a particular point or points over a particular period. A greenhouse gas title-holder who reasonably believes that the title area contains an ***eligible greenhouse gas storage formation*** may apply for a declaration that it is an ***identified greenhouse gas storage formation***.

Spatial extent

41. The spatial extent of an eligible greenhouse gas storage formation is the vertical and horizontal extent of the ***expected migration pathway(s)*** of the injected greenhouse gas substance ***over a predicted period***. This ***predicted period*** is:

the proposed injection period + the notional site closing period.

Note 1: The ***expected migration pathway*** is worked out on the basis of any assumptions and/or methodologies specified in the regulations and the level(s) of probability specified in the regulations.

Note 2: The ***notional site closing period*** is the period between the end of the proposed injection period and the estimated earliest time when there will be sufficient certainty about the fate of the injected greenhouse gas substance to enable the responsible Commonwealth Minister to grant a site closing certificate.

Note 3: For the requirements for the responsible Commonwealth Minister to grant a site closing certificate, see s 249CZF.

Item 109 Section 15F Significant risk

42. Many of the decisions made by the responsible Commonwealth Minister under the greenhouse gas provisions depend on whether the Minister is satisfied that there is a 'significant risk' of an adverse impact occurring. Section 15F provides for the circumstance where there is only a small risk of the adverse impact occurring but where, if the adverse impact does occur, it will be large. The section provides that, in such a case, the risk is taken to be a significant risk, even if the probability is low.

Item 119 Section 79 (Declared exploration permits)

43. Item 119 inserts new subsections into section 79, which is the section that provides for the conditions to which a petroleum exploration permit is subject. The new subsections apply only to a ***declared exploration permit***. Only a ***post-commencement exploration permit*** can become a ***declared exploration permit***. The process by which an exploration permit becomes 'declared' is in proposed section 79B.
44. New subsection 79(8) provides that a declared exploration permit is subject to the condition that the permittee will not carry on ***key petroleum operations*** unless the responsible Commonwealth Minister has approved the operations under proposed section 79A. This condition does not have to be specified in the permit.
45. Subsection (10) provides that, where the responsible Commonwealth Minister approves ***key petroleum operations***, the Minister may impose new conditions on the permit.
46. Subsection (12) provides that the new conditions may require the permittee to ensure that wells made in the permit area are made in a manner and to a standard that will facilitate the plugging of the wells (ie at the decommissioning stage) in a way that restores or maintains the suitability of a geological formation for the permanent storage of a greenhouse gas substance. The reason why the responsible Commonwealth Minister may impose such a condition is that a well may only be able to be plugged to the requisite standard if it has been initially constructed in a manner that facilitates plugging to that standard.

Item 120 Proposed section 79A Declared exploration permit—Approval by responsible Commonwealth Minister of key petroleum operations

47. Proposed section 79A relates to the statutory condition imposed by the new provisions in section 79 that the holder of a ***declared exploration permit*** must obtain the approval of the responsible Commonwealth Minister in order to carry out ***key petroleum operations*** in the permit area. The term key petroleum operations is defined in section 6. Key petroleum operations are activities that it is considered may have impacts of some kind on greenhouse gas operations under a present or future greenhouse gas title. The impacts that these petroleum operations may have on greenhouse gas operations include not only impacts at the level of geological formations but also physical interference on the surface, for example where vessels may be in close proximity.
48. Proposed subsections (1) and (2) provide for a petroleum exploration permittee to apply to the responsible Commonwealth Minister for approval of one or more key petroleum operations. The responsible Commonwealth Minister may give the approval or refuse to give the approval.

49. In deciding whether or not to give an approval, the responsible Commonwealth Minister may have regard to any matters that the Minister considers relevant (see proposed subsection (9)). There are, however, some matters to which the Minister must have regard and there are some circumstances in which an approval must not be given.

Matters to which the Minister must have regard

50. Proposed subsection (4) provides that, in deciding whether to approve key petroleum operations, the responsible Commonwealth Minister must have regard to potential impacts on greenhouse gas injection or storage operations under any existing greenhouse gas assessment permit, holding lease or injection licence. Where there is a greenhouse gas permit or lease in force over relevant blocks, the Minister must also have regard to potential impacts on greenhouse gas injection or storage operations under a future greenhouse gas title over those blocks.
51. Proposed subsection (5) applies if the responsible Commonwealth Minister is satisfied that there is a significant risk that any of the key petroleum operations will have a significant adverse impact on injection or storage operations that are being, or could be, carried on under an existing greenhouse gas assessment permit, holding lease or injection licence held by a person other than the applicant. In that case, the subsection provides that the Minister must have regard to whether the holder of the greenhouse gas title has agreed in writing to the carrying out of the key petroleum operations and, if so, to the terms of that agreement. In relation to the risk of impacts on a greenhouse gas assessment permit or holding lease, there does not have to be an agreement in order for the Minister to give the approval. But if there is an agreement, the Minister must have regard to it.
52. Proposed subsection (6) makes the same provision in relation to a future greenhouse gas holding lease or injection licence, where an existing greenhouse gas title is in force over the block or blocks in question, except that the relevant agreement (if any) will be with the holder of the existing greenhouse gas title.
53. Proposed subsection (7) requires the responsible Commonwealth Minister to have regard to the public interest.

Circumstances in which approval must not be given

54. The circumstances in which approval must not be given relate to impacts on existing injection licences. (An injection licence is given the same level of ‘impacts’ protection as a pre-commencement petroleum title. This is because of the level of investment required in order to develop a greenhouse gas project to the injection and storage stage.)
55. Proposed subsection (10) applies if the responsible Commonwealth Minister is satisfied that there is a significant risk that the key petroleum operations will have a significant adverse impact on injection or storage under an existing injection licence

held by a person other than the applicant. In that case, the responsible Commonwealth Minister must not approve the key petroleum operations unless the existing injection licensee has agreed to the petroleum title-holder carrying on the operations.

56. Proposed subsection (11) makes clear that there is no entitlement to an approval under this section. The fact of having obtained a post-commencement exploration permit does not 'guarantee' that the permittee will be able to carry out any particular exploration program, for example that an exploration well can be drilled in a particular place. A further example of the operation of proposed subsection (11) is that, even if a greenhouse gas title-holder has agreed to the carrying out of the key petroleum operations that the petroleum permittee proposes, the responsible Commonwealth Minister may refuse to give the approval if the agreement contains terms that the Minister considers are contrary to the public interest.

Item 120 Proposed section 79B Declared exploration permits

57. Proposed section 79B provides the process by which a post-commencement exploration permit may become a ***declared exploration permit***. The responsible Commonwealth Minister may make a determination under this section either as soon as a permit comes into force or at any later time when the permit is in force. There is also provision for the Minister to revoke a determination. A pre-commencement petroleum title cannot be 'declared'.
58. Subsection (1) provides that, if the responsible Commonwealth Minister is satisfied that there is a significant risk that any of the key petroleum operations that could be carried on under a petroleum exploration permit will have a significant adverse impact on injection or storage operations that are being, or could be, carried on under an existing or future greenhouse gas assessment permit, holding lease or injection licence, the Minister may determine that the petroleum exploration permit is a declared exploration permit.
59. Under subsection (2), if at any time the responsible Commonwealth Minister is no longer satisfied that the exploration permit meets the criteria for 'declaration', the Minister must revoke the declaration.

Item 122 Section 114 (Declared retention leases)

60. Item 122 inserts new subsections into section 114, which is the section that provides for the conditions to which a petroleum retention lease is subject. The new subsections apply only to a ***declared retention lease***. Only a ***post-commencement retention lease*** can become a ***declared retention lease***. The process by which a retention lease becomes 'declared' is in proposed section 114B.
61. New subsection 114(11) provides that a declared retention lease is subject to the condition that the lessee will not carry on ***key petroleum operations*** unless the

responsible Commonwealth Minister has approved the operations under proposed section 114A. This condition does not have to be specified in the permit.

62. Subsection (13) provides that, where the responsible Commonwealth Minister approves *key petroleum operations*, the Minister may impose new conditions on the lease.
63. Subsection (15) provides that the new conditions may require the lessee to ensure that wells made in the lease area are made in a manner and to a standard that will facilitate the plugging of the wells (ie at the decommissioning stage) in a way that restores or maintains the suitability of a geological formation for the permanent storage of a greenhouse gas substance. The reason why the responsible Commonwealth Minister may impose such a condition is that a well may only be able to be plugged to the requisite standard if it has been initially constructed in a manner that facilitates plugging to that standard.

Item 123 Proposed section 114A Declared retention lease—Approval by responsible Commonwealth Minister of key petroleum operations

64. Proposed section 114A relates to the statutory condition imposed by the new provisions in section 114 that the holder of a *declared retention lease* must obtain the approval of the responsible Commonwealth Minister in order to carry out *key petroleum operations* in the lease area. The term *key petroleum operations* is defined in section 6. Key petroleum operations are activities that it is considered may have impacts of some kind on greenhouse gas operations under a present or future greenhouse gas title. The impacts that these petroleum operations may have on greenhouse gas operations include not only impacts at the level of geological formations but also physical interference on the surface, for example where vessels may be in close proximity.
65. Proposed subsections 114A(1) and (2) provide for a petroleum retention lessee to apply to the responsible Commonwealth Minister for approval of one or more key petroleum operations. The responsible Commonwealth Minister may give the approval or refuse to give the approval.
66. In deciding whether or not to give an approval, the responsible Commonwealth Minister may have regard to any matters that the Minister considers relevant (see proposed subsection (9)). There are, however, some matters to which the Minister must have regard and there are some circumstances in which an approval must not be given.

Matters to which the Minister must have regard

67. Proposed subsection (4) provides that, in deciding whether to approve key petroleum operations, the responsible Commonwealth Minister must have regard to potential impacts on greenhouse gas injection or storage operations under any existing greenhouse gas assessment permit, holding lease or injection licence. Where there is

a greenhouse gas permit or lease in force over relevant blocks, the Minister must also have regard to potential impacts on greenhouse gas injection or storage operations under a future greenhouse gas title over those blocks.

68. Proposed subsection (5) applies if the responsible Commonwealth Minister is satisfied that there is a significant risk that any of the key petroleum operations will have a significant adverse impact on injection or storage operations that are being, or could be, carried on under an existing greenhouse gas assessment permit, holding lease or injection licence held by a person other than the applicant. In that case, the subsection provides that the Minister must have regard to whether the holder of the greenhouse gas title has agreed in writing to the carrying out of the key petroleum operations and, if so, to the terms of that agreement. In relation to the risk of impacts on a greenhouse gas assessment permit or holding lease, there does not have to be an agreement in order for the Minister to give the approval. But if there is an agreement, the Minister must have regard to it.
69. Proposed subsection (6) makes the same provision in relation to a future greenhouse gas holding lease or injection licence, where an existing greenhouse gas title is in force over the block or blocks in question, except that the relevant agreement (if any) will be with the holder of the existing greenhouse gas title.
70. Proposed subsection (7) requires the responsible Commonwealth Minister to have regard to the public interest.

Circumstances in which approval must not be given

71. The circumstances in which approval must not be given relate to impacts on existing injection licences. (An injection licence is given the same level of ‘impacts’ protection as a pre-commencement petroleum title. This is because of the level of investment required in order to develop a greenhouse gas project to the injection and storage stage.)
72. Proposed subsection (10) applies if the responsible Commonwealth Minister is satisfied that there is a significant risk that the key petroleum operations will have a significant adverse impact on injection or storage under an existing injection licence held by a person other than the applicant. In that case, the responsible Commonwealth Minister must not approve the key petroleum operations unless the existing injection licensee has agreed to the petroleum title-holder carrying on the operations.
73. Proposed subsection (11) makes clear that there is no entitlement to an approval under this section.

Item 123 Proposed section 114B Declared retention leases

74. Proposed section 114B provides the process by which a post-commencement retention lease may become a ***declared retention lease***. The responsible

Commonwealth Minister may make a determination under this section either as soon as a lease comes into force or at any later time when the lease is in force. There is also provision for the Minister to revoke a determination. A pre-commencement petroleum title cannot be 'declared'.

75. Subsection 114B(1) provides that, if the responsible Commonwealth Minister is satisfied that there is a significant risk that any of the key petroleum operations that could be carried on under a petroleum retention lease will have a significant adverse impact on injection or storage operations that are being, or could be, carried on under an existing or future greenhouse gas assessment permit, holding lease or injection licence, the Minister may determine that the petroleum retention lease is a declared retention lease.
76. Under subsection (2), if at any time the responsible Commonwealth Minister is no longer satisfied that the retention lease meets the criteria for 'declaration', the Minister must revoke the declaration.

Item 127 Section 138 (Declared production licences)

77. Item 127 inserts new subsections into section 138, which is the section that provides for the conditions to which a petroleum production licence is subject. The new subsections apply only to a ***declared production licence***. Only a ***post-commencement production licence*** can become a ***declared production licence***. The process by which a production licence becomes 'declared' is in proposed section 138B.
78. New subsection 138(10) provides that a declared production licence is subject to the condition that the licensee will not carry on ***key petroleum operations*** unless the responsible Commonwealth Minister has approved the operations under proposed section 138A. This condition does not have to be specified in the licence.
79. Subsection (12) provides that, where the responsible Commonwealth Minister approves ***key petroleum operations***, the Minister may impose new conditions on the licence.
80. Subsection (14) provides that the new conditions may require the licensee to ensure that wells made in the licence area are made in a manner and to a standard that will facilitate the plugging of the wells (ie at the decommissioning stage) in a way that restores or maintains the suitability of a geological formation for the permanent storage of a greenhouse gas substance. The reason why the responsible Commonwealth Minister may impose such a condition is that a well may only be able to be plugged to the requisite standard if it has been initially constructed in a manner that facilitates plugging to that standard.

Item 128 Proposed section 138A Declared production licence—Approval by responsible Commonwealth Minister of key petroleum operations

81. Proposed section 138A relates to the statutory condition imposed by the new provisions in section 138 that the holder of a ***declared production licence*** must obtain the approval of the responsible Commonwealth Minister in order to carry out ***key petroleum operations*** in the licence area. The term key petroleum operations is defined in section 6. Key petroleum operations are activities that it is considered may have impacts of some kind on greenhouse gas operations under a present or future greenhouse gas title. The impacts that these petroleum operations may have on greenhouse gas operations include not only impacts at the level of geological formations but also physical interference on the surface, for example where vessels may be in close proximity.
82. Proposed subsections 138A(1) and (2) provide for a petroleum production licensee to apply to the responsible Commonwealth Minister for approval of one or more key petroleum operations. The responsible Commonwealth Minister may give the approval or refuse to give the approval.
83. In deciding whether or not to give an approval, the responsible Commonwealth Minister may have regard to any matters that the Minister considers relevant (see proposed subsection (9)). There are, however, some matters to which the Minister must have regard and there are some circumstances in which an approval must not be given.

Matters to which the Minister must have regard

84. Proposed subsection (4) provides that, in deciding whether to approve key petroleum operations, the responsible Commonwealth Minister must have regard to potential impacts on greenhouse gas injection or storage operations under any existing greenhouse gas assessment permit, holding lease or injection licence. Where there is a greenhouse gas permit or lease in force over relevant blocks, the Minister must also have regard to potential impacts on greenhouse gas injection or storage operations under a future greenhouse gas title over those blocks.
85. Proposed subsection (5) applies if the responsible Commonwealth Minister is satisfied that there is a significant risk that any of the key petroleum operations will have a significant adverse impact on injection or storage operations that are being, or could be, carried on under an existing greenhouse gas assessment permit, holding lease or injection licence held by a person other than the applicant. In that case, the subsection provides that the Minister must have regard to whether the holder of the greenhouse gas title has agreed in writing to the carrying out of the key petroleum operations and, if so, to the terms of that agreement. In relation to the risk of impacts on a greenhouse gas assessment permit or holding lease, there does not have to be an agreement in order for the Minister to give the approval. But if there is an agreement, the Minister must have regard to it.

86. Proposed subsection (6) makes the same provision in relation to a future greenhouse gas holding lease or injection licence, where an existing greenhouse gas title is in force over the block or blocks in question, except that the relevant agreement (if any) will be with the holder of the existing greenhouse gas title.
87. Proposed subsection (7) requires the responsible Commonwealth Minister to have regard to the public interest.

Circumstances in which approval must not be given

88. The circumstances in which approval must not be given relate to impacts on existing injection licences. (An injection licence is given the same level of ‘impacts’ protection as a pre-commencement petroleum title. This is because of the level of investment required in order to develop a greenhouse gas project to the injection and storage stage.)
89. Proposed subsection (10) applies if the responsible Commonwealth Minister is satisfied that there is a significant risk that the key petroleum operations will have a significant adverse impact on injection or storage under an existing injection licence held by a person other than the applicant. In that case, the responsible Commonwealth Minister must not approve the key petroleum operations unless the existing injection licensee has agreed to the petroleum title-holder carrying on the operations.
90. Proposed subsection (11) makes clear that there is no entitlement to an approval under this section.

Item 128 Proposed section 138B Declared injection licences

91. Proposed section 138B provides the process by which a post-commencement injection licence may become a **declared injection licence**. The responsible Commonwealth Minister may make a determination under this section either as soon as a licence comes into force or at any later time when the licence is in force. There is also provision for the Minister to revoke a determination. A pre-commencement petroleum title cannot be 'declared'.
92. Subsection 138B(1) provides that, if the responsible Commonwealth Minister is satisfied that there is a significant risk that any of the key petroleum operations that could be carried on under the petroleum production licence will have a significant adverse impact on injection or storage operations that are being, or could be, carried on under an existing or future greenhouse gas assessment permit, holding lease or injection licence, the Minister may determine that the petroleum injection licence is a declared injection licence.
93. Under subsection (2), if at any time the responsible Commonwealth Minister is no longer satisfied that the injection licence meets the criteria for 'declaration', the Minister must revoke the declaration.

Item 169 Insertion of new Chapter 2A—Regulation of activities relating to injection and storage of greenhouse gas substances

Part 2A.1—Introduction

Proposed section 249AA Simplified outline of Chapter 2A

94. Proposed section 249AA gives a summary of Chapter 2A, which provides for the grant of greenhouse gas titles and the regulation of activities carried out under those titles. This summary will not form part of the operative text of the Act.

Part 2A.2—Greenhouse gas assessment permits

95. A greenhouse gas assessment permit corresponds to a petroleum exploration permit. It is the title under which exploration is carried out for a geological formation that is suitable to be used for the injection and permanent storage of a greenhouse gas substance, and for one or more suitable injection sites.

Division 1—General provisions

Proposed section 249AB Simplified outline of Part 2A.2

96. This clause gives a summary of Part 2A.2 covering assessment permits. This summary will not form part of the operative text of the Act.

Proposed section 249AC Prohibition of unauthorised exploration for potential greenhouse gas storage formation, or potential greenhouse gas injection site, in offshore area

97. Proposed section 249AC makes it an offence to explore in an offshore area for a potential greenhouse gas storage formation or potential greenhouse gas injection site unless the exploration is authorised by a greenhouse gas assessment permit or is otherwise authorised or required by or under this Act. The purpose of this prohibition is to ensure that all greenhouse gas exploration in Commonwealth waters is brought under the regulatory supervision of the responsible Commonwealth Minister. This is so that any activity having the potential to cause damage to the environment or to resources or interfere with the operations of other users of the sea or seabed is subject to regulatory approval, for example, so that the activity will be covered by an environment plan that is in force under the regulations.
98. This clause extends the common, dictionary meaning of the word 'explore' in order to regulate all seismic surveying, seabed sampling surveys and various airborne remote sensing techniques such as gravity, magnetic and laser fluorimetry surveys that are designed to assist in locating storage formations. Such surveys can be carried out by various titleholders under the Act or by parties who are not themselves petroleum or greenhouse gas explorers. The surveys are performed by speculative survey companies (normally working under a special prospecting authority or search authority) who aim to sell the survey results to titleholders. Without this clause, there is doubt whether such speculative activities could be regulated under the Act.

Proposed section 249AD Rights conferred by greenhouse gas assessment permit

99. Proposed section 249AD authorises the permittee to explore in the permit area for a 'potential greenhouse gas storage formation' or a 'potential greenhouse gas injection site'. (These terms are defined in section 6.)
100. Subsection (1) authorises the holder of an assessment permit to carry out all forms of exploration in the permit area, including surveys and the drilling of wells. Subsection (1) expressly extends the right to explore to injection and storage in a geological formation, on an appraisal basis, of a greenhouse gas substance, air, petroleum or water. (Appraisal of a resource is, in any case, a form of exploration.)
101. The right of a permittee to explore is subject to the conditions of the permit. The conditions include a requirement to obtain the approval of the responsible Commonwealth Minister to carry out 'key greenhouse gas operations' (see proposed sections 249AE and 249AF)
102. The right is also subject to compliance with the Act and regulations. This refers to (among other things) the requirements under the regulations that must be complied with, and other regulatory approval processes that need to be gone through, before actual exploration activity may commence. For example, no exploration activity can be commenced unless there is an environment plan in force under the regulations and in the case of drilling an exploration well, a range of regulatory approvals would have to be obtained.
103. In a case where a greenhouse gas exploration well yields petroleum, para 249AD(1)(g) authorises the permittee, with the approval of the responsible Commonwealth Minister, to recover petroleum for the purpose only of appraising the petroleum discovery. (Any petroleum recovered does not become the property of the permittee.) A greenhouse gas permittee cannot be compelled to carry out this appraisal work, however, the absence of appraisal data will make it difficult for the responsible Commonwealth Minister, when considering an application for a subsequent greenhouse gas title over the relevant block(s), to reach the necessary state of satisfaction as to the potential impacts of future greenhouse gas activities in the block(s).
104. A greenhouse gas assessment permit also authorises the permittee to carry on such operations, and execute such works in the permit area as are necessary for the purposes of carrying on the above exploration activities.
105. There is no statutory requirement that a substance injected on an appraisal basis be permanently stored, because the very purpose of the injection is to appraise the ability of the storage formation to retain injected substances permanently. It is possible that the substance injected will remain permanently stored but it is also possible that it will not. The quantities injected will be small, however, so escape from the storage formation, even into the atmosphere, should not cause problems. Any appraisal injection will be a 'key greenhouse gas operation' and therefore subject

to prior approval by the responsible Commonwealth Minister, including as to the substance to be injected.

Proposed section 249AE Conditions of greenhouse gas assessment permits

106. Proposed section 249AE enables the responsible Commonwealth Minister to grant a greenhouse gas assessment permit subject to whatever conditions the Minister thinks appropriate. Conditions must be specified in the permit, except for those in subsections (3) and (4), which are imposed by the section itself.

Approval of key greenhouse gas operations

107. Proposed subsection 249AE(3) makes it a statutory condition of a greenhouse gas assessment permit that the permittee will not carry on 'key greenhouse gas operations' unless the responsible Commonwealth Minister has approved the operations under proposed section 249AF. Conditions may be attached to the approval and compliance with those conditions is itself a condition of the permit.

Providing or topping-up security

108. Proposed subsection 249AE(4) also makes it a statutory condition of a permit that, if the responsible Commonwealth Minister at any time, under proposed section 249NCA, requires the permittee to provide security, or to top-up any security previously provided, the permit-holder will provide the security or additional security.

Work-bid greenhouse gas assessment permits

109. Proposed subsection 249AE(5) authorises the responsible Commonwealth Minister to impose conditions on a work-bid greenhouse gas assessment permit requiring the carrying out of work (which may be particular work) or the spending of particular amounts in carrying out such work. The permit may specify periods within which the work is to be carried out. The conditions imposed under proposed subsection (5) may also require the permittee to comply with directions relating to the above matters.
110. Proposed subsection 249AE(6) provides that a cash-bid greenhouse gas assessment permit must not be granted subject to conditions of the kind in proposed subsection (5).
111. Proposed subsection 249AE(8) provides that the matters with respect to which the responsible Commonwealth Minister can impose conditions are not limited by subsections (3), (4) or (5).

Proposed section 249AF Approval by responsible Commonwealth Minister of key greenhouse gas operations

112. Proposed section 249AF relates to the statutory condition imposed by proposed section 249AE that a greenhouse gas assessment permittee must obtain the approval of the responsible Commonwealth Minister in order to carry out 'key greenhouse gas operations' in the permit area. The term 'key greenhouse gas operations' is defined in section 6. Key greenhouse gas operations are greenhouse gas activities that it is considered may have impacts of some kind on petroleum operations under a present or future petroleum title. The impacts that these greenhouse gas operations may have on petroleum operations include not only impacts at the level of geological formations but also physical interference on the surface, for example where vessels may be in close proximity.
113. Proposed subsections (1) and (2) provide for a greenhouse gas assessment permittee to apply to the responsible Commonwealth Minister for approval of one or more key greenhouse gas operations. The responsible Commonwealth Minister may give the approval, with or without conditions, or refuse to give the approval.
114. In deciding whether or not to give an approval, the responsible Commonwealth Minister may have regard to any matters that the Minister considers relevant (see proposed subsection (10)). There are, however, some matters to which the Minister must have regard and there are some circumstances in which an approval must not be given.

Matters to which the Minister must have regard

115. Proposed subsection (4) provides that, in deciding whether to approve key greenhouse gas operations, the responsible Commonwealth Minister must have regard to potential impacts on petroleum exploration or recovery operations under any existing or future petroleum exploration permit, retention lease or production licence. This applies both to pre-commencement and post-commencement petroleum titles. In the case of potential impacts on a future petroleum title, there need not be any petroleum title in existence over the relevant blocks.
116. Proposed subsection (5) applies if the responsible Commonwealth Minister is satisfied that there is a significant risk that any of the key greenhouse gas operations will have a significant adverse impact on operations that are being, or could be, carried on under an existing (pre-commencement or post-commencement) petroleum exploration permit, retention lease or production licence held by a person other than the applicant. In that case, the subsection provides that the Minister must have regard to whether the holder of the petroleum title has agreed in writing to the carrying out of the key greenhouse gas operations and, if so, to the terms of that agreement. In relation to the risk of impacts on a post-commencement exploration permit or retention lease, there does not have to be an agreement in order for the Minister to give the approval. But if there is an agreement, the Minister must have regard to it.

117. Proposed subsection (6) makes the same provision in relation to a future (pre-commencement or post-commencement) petroleum exploration permit, retention lease or production licence, except that the relevant agreement (if any) will be with the holder of the existing petroleum title (if any) over the block or blocks in question.
118. Proposed subsection (7) provides that, where the key greenhouse gas operations for which approval is sought is, or includes, injection or storage on an appraisal basis, the responsible Commonwealth Minister must have regard to the composition of the substance.
119. Proposed subsection (8) requires the responsible Commonwealth Minister to have regard to the public interest. For example, the Minister might consider that there was a public interest in enabling an onshore electricity generation plant to be constructed on a zero-greenhouse gas emissions basis. Or the Minister might consider that there was a public interest in ensuring that commerciality of a major new petroleum discovery was not compromised by drilling of greenhouse gas exploration wells.

Circumstances in which approval must not be given

120. The circumstances in which approval must not be given relate to impacts on either existing or future pre-commencement petroleum titles or existing post-commencement production licences. (An existing post-commencement production licence is given the same level of ‘impacts’ protection as a pre-commencement title. This is because of the level of investment required in order to develop a petroleum discovery to the production stage.)
121. Proposed subsection (11) applies if the responsible Commonwealth Minister is satisfied that there is a significant risk that the key greenhouse gas (exploration) operations will have a significant adverse impact on petroleum exploration or recovery under an existing pre-commencement petroleum title, or an existing post-commencement production licence, held by a person other than the applicant. In that case, the responsible Commonwealth Minister must not approve the greenhouse gas operations unless the existing petroleum title-holder has agreed to the greenhouse gas title-holder carrying on the operations.
122. Proposed subsection (12) makes the same provision in relation to a future pre-commencement petroleum exploration permit, retention lease or production licence, except that the relevant agreement must be with the holder of the existing pre-commencement petroleum title over the block or blocks in question.
123. Proposed subsection (13) makes clear that there is no entitlement to an approval under this section . The fact of having obtained an assessment permit does not 'guarantee' that the permittee will be able to carry out any particular exploration program, for example that an exploration well can be drilled in a particular place. A further example of the operation of proposed subsection (13) is that, even if a pre-commencement petroleum title-holder has agreed to the carrying out of the greenhouse gas exploration operations that the permittee proposes, the responsible

Commonwealth Minister may refuse to give the approval if the agreement contains terms that the Minister considers are contrary to the public interest.

124. Proposed subsection (14) provides that, for the purposes of this section, a title is taken to be in force notwithstanding that rights under the title have been suspended under s 229.

Proposed section 249AH Duration of greenhouse gas assessment permit

125. Proposed section 249AH provides that a greenhouse gas assessment permit remains in force for 6 years. The Notes to this section refer to statutory processes under other sections that can affect the duration of a permit.

Proposed section 249AHA Extension of greenhouse gas assessment permit if permittee applies for a declaration of an identified greenhouse gas storage formation

126. Proposed section 249AHA is one of the sections that can extend the duration of an assessment permit. The section applies where, before the time when the assessment permit would otherwise expire, the permittee applies for a declaration of an identified greenhouse gas storage formation. If the assessment permit would otherwise have expired before the responsible Commonwealth Minister makes a decision on the application for a declaration, the permit will instead continue in force by operation of this section until:
- (a) if the Minister makes the declaration – the end of the period of 12 months after the making of the declaration; or
 - (b) if the Minister refuses to make the declaration – the time when notice of the refusal is given to the permittee.

Division 2—Obtaining a work-bid greenhouse gas assessment permit

Proposed section 249AJ Application for work-bid greenhouse gas assessment permit—advertising of blocks

127. This section provides for the responsible Commonwealth Minister to release acreage for the making of applications for greenhouse gas assessment permits. There could be a general release of a substantial number of blocks, perhaps on an annual basis, as is the case with the release of petroleum acreage, or there could be a release of individual blocks or small numbers of blocks, either on request or where blocks previously held under title have become vacant.
128. The provisions in section 249AJ to section 249AO for applying for a work-bid greenhouse gas assessment permit are the same as the equivalent provisions for obtaining a work-bid petroleum exploration permit, with the exception that section 249AM(c) has provision for requiring the applicant to provide a security prior to the making of the grant.

129. As is the case with petroleum exploration permits, section 249AL provides for the ranking of multiple applicants according to the order in which they are 'deserving' of the grant. The criteria on the basis of which they are to be ranked must be made public by the responsible Commonwealth Minister. It is expected that the criteria will, like the petroleum permit grant criteria, be primarily concerned with the extent and quality of the work program bid of each applicant. There may, however, be additional public interest criteria published in relation to some acreage releases.

Division 3—Obtaining a cash-bid greenhouse gas assessment permit

130. Sections 249AP to 249AS are in the same terms as the provisions relating to cash-bid petroleum exploration permits, except that section 249AS(1)(d) has provision for requiring security to be given prior to the actual grant.

Division 4—Declaration of identified greenhouse gas storage formation

Overview

131. In order for the holder of a greenhouse gas assessment permit to advance to a greenhouse gas holding lease or an injection licence, the permittee must obtain from the responsible Commonwealth Minister a declaration of a part of a geological formation as an 'identified greenhouse gas storage formation'. The identified greenhouse gas storage formation must be wholly situated within the permittee's permit area.
132. It is possible to have a second or subsequent identified greenhouse gas storage formation declared in an assessment permit area, holding lease area or injection licence area, provided each of them is wholly situated within the title-holder's current title area.
133. An application for a declaration of an identified greenhouse gas storage formation may also be made by a petroleum production licensee. (A petroleum production licensee may apply for a greenhouse gas injection licence under section 249CQ.)
134. This declaration of an identified greenhouse gas storage formation is a core document that broadly corresponds to the declaration of a petroleum location. Unlike a petroleum location, however, the declaration of the identified greenhouse gas storage formation retains its significance over the whole life of the greenhouse gas project. This is because the injection activities that may be carried out under the eventual injection licence will be controlled, via licence conditions, by the matters specified in the declaration of the identified storage formation.
135. There is scope for the declaration of the identified greenhouse gas storage formation to be varied by the responsible Commonwealth Minister, either at the request of the title-holder or, if circumstances warrant, at the Minister's own instigation. This allows for (eg) variation of one or more fundamental suitability determinants as new information about the storage formation becomes available.

136. Once there is an injection licence in force over the area where an identified greenhouse gas storage formation is located, the declaration and the licence must be kept consistent with each other. A variation to one may therefore require a variation to be made to the other.

Proposed section 249AU Declaration of identified greenhouse gas storage formation

137. An application for a declaration of an identified greenhouse gas storage formation is made under proposed section 249AU. An application may be made by a greenhouse gas assessment permittee, holding lessee or injection licensee, or a petroleum production licensee, who has reasonable grounds to believe that an 'eligible greenhouse gas storage formation' is wholly situated in the permit, lease or licence area, as the case may be (subsection (1)).
138. An 'eligible greenhouse gas storage formation' is a part of a geological formation that is suitable, with or without engineering enhancements, for the permanent storage of a particular amount (at least 100,000 tonnes) of a particular greenhouse gas substance injected at a particular point or points over a particular period (see proposed section 15B). Under subsection 249AU(2), the title-holder applies to have that 'part' of the geological formation declared as an 'identified greenhouse gas storage formation'.
139. Subsection (3) requires an application to set out:
- the applicant's reasons for believing that the 'part' of the geological formation is an 'eligible greenhouse gas storage formation';
 - the 'fundamental suitability determinants' of the 'eligible greenhouse gas storage formation', ie:
 - (a) the amount of greenhouse gas substance that it is suitable to store;
 - (b) the chemical composition of the greenhouse gas substance that it is suitable to store;
 - (c) the proposed injection point or points;
 - (d) the proposed injection period;
 - (e) any proposed engineering enhancements;
 - (f) the effective sealing feature, attribute or mechanism that makes it suitable;
 - an estimate of the spatial extent of the 'eligible greenhouse gas storage formation'; and
 - any other information (including analysis) that is prescribed in the regulations.

140. Subsection (4) enables the responsible Commonwealth Minister to require the applicant to provide further information or to carry out further analysis of information. Subsection (5) provides that, if the applicant fails to provide the required information or analysis, the responsible Commonwealth Minister may refuse to progress the application further. Subsections (6) to (9) provide for the variation of the application with respect to the fundamental suitability determinants or the estimate of the spatial extent.
141. Subsection (10) provides that, if the responsible Commonwealth Minister is satisfied that:
- (i) the part of a geological formation that is the subject of the application is (provided any engineering enhancements nominated in the application are carried out) suitable for the permanent storage of the nominated amount of the nominated greenhouse gas substance, if injected at the nominated injection point or points over the nominated period; and
 - (ii) the estimate of the spatial extent set out in the application is a reasonable estimate;

the Minister must declare that part of the geological formation to be an 'identified greenhouse gas storage formation'.

142. If satisfied of the matters in (i) and (ii) above, the responsible Commonwealth Minister must also declare that the spatial extent of the identified greenhouse gas storage formation is the spatial extent estimated in the application (subsection (10)), and set out that estimate in the declaration (subsection (11)). The Minister must also declare that the fundamental suitability determinants specified in the application are the fundamental suitability determinants of the identified greenhouse gas storage formation (subsection (10)) and set them out in the declaration (subsection (12)).
143. Subsection (14) requires that, unless the responsible Commonwealth Minister is satisfied of all of the matters in (i) and (ii) above, the Minister must refuse to make the declaration.

Proposed section 249AUA Variation of declaration of identified greenhouse gas storage formation

144. Proposed section 249AUA provides for the variation of a declaration of an identified greenhouse gas storage formation, either on application by the holder of the relevant permit, lease or licence, or on the responsible Commonwealth Minister's own initiative. An application by the title-holder must set out the proposed variation and specify the applicant's reason for the proposed variation.
145. Subsection (5) provides that, in deciding whether to vary the declaration, the responsible Commonwealth Minister must have regard to any new information, any new analysis, any relevant scientific or technological developments and such other matters (if any) as the responsible Commonwealth Minister considers relevant.

Subsection (5) does not limit the matters to which the responsible Commonwealth Minister may have regard or the circumstances in which the responsible Commonwealth Minister may decide to vary the declaration.

146. To take an example where an application for a variation is made by the title-holder, the reason for seeking the application may be that the title-holder wishes to increase the amount of greenhouse gas substance to be injected, because new information indicates that the injectivity of the storage formation is better than previously thought. The varied fundamental suitability determinants must still 'work', however. That is, with the fundamental suitability determinants varied, the responsible Commonwealth Minister must still be satisfied in terms of subsection 249AU(10)(b)(i) and (ii). Another example is that the title-holder may have expected a source of greenhouse gas substance to become available that in fact will not materialise. The title-holder may therefore wish to vary downwards the amount to be injected, or the injection rate.
147. An example of the circumstances in which the responsible Commonwealth Minister might vary the declaration on his own initiative is where new information indicates that the storage formation is not suitable for the storage of the amount of greenhouse gas substance specified in the original declaration but would be suitable for the storage of a lesser amount. Subsection (6) requires the responsible Commonwealth Minister to consult the title-holder before making a variation on his own initiative.

Proposed section 249AUB Revocation of declaration of identified greenhouse gas storage formation

148. Proposed section 249AUB provides that the responsible Commonwealth Minister may revoke the declaration if he is satisfied that, using any set of fundamental suitability determinants, the storage formation is not suitable for the permanent storage of at least 100,000 tonnes of a greenhouse gas substance (see section 15B). This power will be exercisable in circumstances where, had more been known at the time, the original declaration would not have been made.
149. Before revoking the declaration, the responsible Commonwealth Minister must consult with the title-holder and also consider whether to vary the declaration under section 249AUA.

Proposed section 249AUBA Register of Identified Greenhouse Gas Storage Formations

150. Proposed section 249AUBA requires the responsible Commonwealth Minister to maintain a Register of Identified Greenhouse Gas Storage Formations.

Division 5—Directions

Section 249AV Responsible Commonwealth Minister may give directions to greenhouse gas assessment permittees

151. Proposed section 249AV confers power on the responsible Commonwealth Minister to give a greenhouse gas assessment permittee a direction for the purpose of eliminating, mitigating or managing the risk that operations under the permit could have a significant adverse impact on operations under an existing or future petroleum title. The responsible Commonwealth Minister can give a direction under this section whether or not there is a petroleum title in existence over the relevant blocks. A direction can therefore be given to protect potential petroleum acreage that has not yet been released.

Section 249AW Compliance with directions

152. Proposed subsection 249AW(1) makes it an offence to fail to comply with a direction under section 249AV. Subsection (2) provides that an offence against subsection (1) is an offence of strict liability. The offence created by the statutory obligation in this section could be difficult to establish if the prosecution were required to prove intention with respect to an omission to do the things required. Accordingly, an obligation of this type is usually imposed by the legislature with the intention that strict liability should apply.

Part 2A.3—Greenhouse gas holding leases

Overview

153. A greenhouse gas holding lease broadly corresponds to a petroleum retention lease. As is the case with a petroleum retention lease, obtaining a greenhouse gas holding lease is not an obligatory step for an assessment permittee in moving towards a greenhouse gas injection licence.
154. A holder of a greenhouse gas assessment permit who has had an identified greenhouse gas storage formation declared in the permit area can proceed directly to a greenhouse gas injection licence, if there will be a source of a greenhouse gas substance available to commence injection within 5 years of the grant of the injection licence. An assessment permittee who does not have a source of a greenhouse gas substance that will be available to commence injection within 5 years, however, can obtain a greenhouse gas holding lease instead. This will enable the lessee to retain tenure over the block(s) to which the identified greenhouse gas storage formation extends while the lessee secures a source of greenhouse gas.
155. A holder of a greenhouse gas injection licence also can choose to revert to a greenhouse gas holding lease over the same blocks.
156. The motivation in each of the above cases to obtain a greenhouse gas holding lease rather than an injection licence is that, if an injection licensee fails to carry out any

injection and storage operations in the licence area for a continuous period of 5 years, the responsible Commonwealth Minister may cancel the injection licence.

157. The holder of a greenhouse gas holding lease can continue to explore for additional storage formations in the lease area (as well as in blocks of the original permit area that the permit is still in force over). If the title-holder finds one or more new storage formations, they can have them declared as identified greenhouse gas storage formations and proceed to storage licence(s) in respect of the blocks to which they extend.

Division 1—General provisions

Proposed section 249BA Simplified outline

158. This clause gives a summary of Part 2.2 covering greenhouse gas holding leases. This summary will not form part of the operative text of the Act.

Proposed section 249BB Rights conferred by greenhouse gas holding lease

159. Proposed section 249BB authorises the lessee to explore in the lease area for a 'potential greenhouse gas storage formation' or a 'potential greenhouse gas injection site'. (These terms are defined in section 6.)
160. Subsection (1) authorises the holder of a holding lease to carry out all forms of exploration in the lease area, including surveys and the drilling of wells. Subsection (1) expressly extends the right to explore to injection and storage in a geological formation, on an appraisal basis, of a greenhouse gas substance, air, petroleum or water. (Appraisal of a resource is, in any case, a form of exploration.)
161. The right of a lessee to explore is subject to the conditions of the lease. The conditions include a requirement to obtain the approval of the responsible Commonwealth Minister to carry out 'key greenhouse gas operations' (see proposed sections 249BC and 249BD)
162. The right is also subject to compliance with the Act and regulations. This refers to requirements under the regulations that must be complied with, and other regulatory approval processes that need to be gone through, before actual exploration activity may commence. For example, no exploration activity can be commenced unless there is an environment plan in force under the regulations that covers the activity and in the case of drilling an exploration well, a range of regulatory approvals would have to be obtained.
163. In a case where a greenhouse gas exploration well yields petroleum, para 249BB(1)(g) authorises the lessee, with the approval of the responsible Commonwealth Minister, to recover petroleum for the purpose only of appraising the petroleum discovery. (Any petroleum recovered does not become the property of the lessee.) A greenhouse gas lessee cannot be compelled to carry out this appraisal

work, however, the absence of appraisal data will make it difficult for the responsible Commonwealth Minister, when considering an application by the lessee for a subsequent greenhouse gas title over the relevant block(s), to reach the necessary state of satisfaction as to the potential impacts of future greenhouse gas activities in the block(s).

164. A greenhouse gas holding lease also authorises the lessee to carry on such operations, and execute such works in the lease area as are necessary for the purposes of carrying on the above exploration activities.
165. There is no statutory requirement that a substance injected on an appraisal basis be permanently stored, because the very purpose of the injection is to appraise the ability of the storage formation to retain injected substances permanently. It is possible that the substance injected will remain permanently stored but it is also possible that it will not. The quantities injected will be small, however, so escape from the storage formation, even into the atmosphere, should not cause problems. Any appraisal injection will be a 'key greenhouse gas operation' and therefore subject to prior approval by the responsible Commonwealth Minister, including as to the substance to be injected.

Proposed section 249BC Conditions of greenhouse gas holding leases

166. Proposed section 249BC enables the responsible Commonwealth Minister to grant a greenhouse gas holding lease subject to whatever conditions the Minister thinks appropriate. Conditions must be specified in the lease, except for those in subsections (3) and (4), which are imposed by the section itself.

Approval of key greenhouse gas operations

167. Proposed subsection 249BC(3) makes it a statutory condition of a greenhouse gas holding lease that the lessee will not carry on 'key greenhouse gas operations' unless the responsible Commonwealth Minister has approved the operations under proposed section 249BD. Conditions may be attached to the approval and compliance with those conditions is itself a condition of the lease.

Providing or topping-up security

168. Subsection 249AE(4) also makes it a statutory condition of a lease that, if the responsible Commonwealth Minister at any time, under proposed section 249NCA, requires the lessee to provide security, or to top-up any security previously provided, the lessee will provide the security or additional security.

Work to be carried out by lessee

169. Subsection 249BC(5) authorises the responsible Commonwealth Minister to impose conditions on a holding lease requiring the carrying out of work (which may be particular work) or the spending of particular amounts in carrying out work. The

conditions imposed under proposed subsection (5) may also require the lessee to comply with directions relating to the above matters.

170. Proposed subsection 249BC(7) provides that the matters with respect to which the responsible Commonwealth Minister can impose conditions are not limited by subsections (3), (4) or (5).

Proposed section 249BD Approval by responsible Commonwealth Minister of key greenhouse gas operations

171. Proposed section 249BD relates to the statutory condition imposed by proposed section 249BC that a greenhouse gas holding lessee must obtain the approval of the responsible Commonwealth Minister in order to carry out 'key greenhouse gas operations' in the lease area. The term 'key greenhouse gas operations' is defined in section 6. Key greenhouse gas operations are greenhouse gas activities that it is considered may have impacts of some kind on petroleum operations under a present or future petroleum title. The impacts that these greenhouse gas operations may have on petroleum operations include not only impacts at the level of geological formations but also physical interference on the surface, for example where vessels may be in close proximity.
172. Subsections (1) and (2) provide for a greenhouse gas holding lessee to apply to the responsible Commonwealth Minister for approval of one or more key greenhouse gas operations. The responsible Commonwealth Minister may give the approval, with or without conditions, or refuse to give the approval.
173. In deciding whether or not to give an approval, the responsible Commonwealth Minister may have regard to any matters that the Minister considers relevant (see subsection 10). There are, however, some matters to which the Minister must have regard and there are some circumstances in which an approval must not be given.

Matters to which the Minister must have regard

174. Proposed subsection (4) provides that, in deciding whether to approve key greenhouse gas operations, the responsible Commonwealth Minister must have regard to potential impacts on petroleum exploration or recovery operations under any existing or future petroleum exploration permit, retention lease or production licence. This applies both to pre-commencement and post-commencement petroleum titles. In the case of potential impacts on a future petroleum title, there need not be any petroleum title in existence over the relevant blocks. The responsible Commonwealth Minister may therefore have regard to impacts on petroleum still to be discovered in acreage not yet released.
175. Subsection (5) applies if the responsible Commonwealth Minister is satisfied that there is a significant risk that any of the key greenhouse gas operations will have a significant adverse impact on operations that are being, or could be, carried on under an existing (pre-commencement or post-commencement) petroleum exploration

permit, retention lease or production licence held by a person other than the applicant. In that case, the subsection provides that the Minister must have regard to whether the holder of the petroleum title has agreed in writing to the carrying out of the key greenhouse gas operations and, if so, to the terms of that agreement. In relation to the risk of impacts on a post-commencement exploration permit or retention lease, there does not have to be an agreement in order for the Minister to give the approval. But if there is an agreement, the Minister must have regard to it.

176. Proposed subsection (6) makes the same provision in relation to a future (pre-commencement or post-commencement) petroleum exploration permit, retention lease or production licence, except that the relevant agreement (if any) will be with the holder of the existing petroleum title (if any) over the block or blocks in question.
177. Proposed subsection (7) provides that, where the key greenhouse gas operations for which approval is sought is, or includes, injection or storage on an appraisal basis, the responsible Commonwealth Minister must have regard to the composition of the substance.
178. Proposed subsection (8) requires the responsible Commonwealth Minister to have regard to the public interest. For example, the Minister might consider that there was a public interest in enabling an onshore electricity generation plant to be constructed on a zero-greenhouse gas emissions basis. Or the Minister might consider that there was a public interest in ensuring that commerciality of a major new petroleum discovery was not compromised by drilling of greenhouse gas exploration wells.

Circumstances in which approval must not be given

179. The circumstances in which approval must not be given relate to impacts on either existing or future pre-commencement petroleum titles or existing post-commencement production licences. (An existing post-commencement production licence is given the same level of ‘impacts’ protection as a pre-commencement title. This is because of the level of investment required in order to develop a petroleum discovery to the production stage.)
180. Subsection (11) applies if the responsible Commonwealth Minister is satisfied that there is a significant risk that the key greenhouse gas operations will have a significant adverse impact on petroleum exploration or recovery under an existing pre-commencement petroleum title, or an existing post-commencement production licence, held by a person other than the applicant. In that case, the responsible Commonwealth Minister must not approve the greenhouse gas operations unless the existing petroleum title-holder has agreed to the greenhouse gas title-holder carrying on the operations.
181. Subsection (12) makes the same provision in relation to a future pre-commencement petroleum exploration permit, retention lease or production licence, except that the relevant agreement must be with the holder of the existing pre-commencement petroleum title over the block or blocks in question.

182. Proposed subsection (13) makes clear that there is no entitlement to an approval under this section . The fact of having obtained a holding lease does not 'guarantee' that the lessee will be able to carry out any particular exploration program, for example that an exploration well can be drilled in a particular place. A further example of the operation of proposed subsection (13) is that, even if a pre-commencement petroleum title-holder has agreed to the carrying out of the greenhouse gas exploration operations that the lessee proposes, the responsible Commonwealth Minister may refuse to give the approval if the agreement contains terms that the Minister considers are contrary to the public interest.
183. Proposed subsection (14) provides that, for the purposes of this section, a title is taken to be in force notwithstanding that rights under the title have been suspended under section 229.

Proposed section 249BF Duration of greenhouse gas holding lease

184. Proposed section 249BF provides that a greenhouse gas holding lease (other than a special greenhouse gas holding lease) remains in force for 5 years. It can be renewed once, for a further period of 5 years. There are special rules about the continuation in force of a holding lease after it would otherwise have expired in a number of other sections.
185. Subsection (2) provides that a special greenhouse gas holding lease remains in force indefinitely. Proposed sections 249BSA, 249BSB and 249BSC provide for the grant of a special greenhouse gas holding lease to an unsuccessful applicant for a greenhouse gas injection licence, where the sole reason for the refusal to grant the injection licence was that there was a risk of an adverse impact on petroleum operations. The purpose of a special greenhouse gas holding lease is to enable the lessee to retain tenure over the block or blocks where an identified greenhouse gas storage formation is located during the time required for the petroleum operations to be completed. An indefinite duration for a special holding lease is therefore appropriate.

Division 2—Obtaining a greenhouse gas holding lease

Subdivision A

Proposed section 249BH Application for greenhouse gas holding lease by the holder of a greenhouse gas assessment permit

186. Proposed section 249BH provides for the making of an application for a greenhouse gas holding lease by the holder of a greenhouse gas assessment permit who has one or more identified greenhouse gas storage formations wholly located in the permit area. This section sets out the rules for determining whether multiple storage formations are to be covered by a single holding lease or whether multiple holding leases are to be obtained. Generally speaking, the outcome depends on whether there is horizontal overlapping of the storage formations or, if there is no horizontal overlapping, whether the storage formations extend to the same block or to blocks

that have a side or a corner point in common. Otherwise, a separate holding lease is to be obtained.

Single identified greenhouse gas storage formation

187. Subsection (2) provides that, if there is a single identified greenhouse gas storage formation, the permittee may apply for a holding lease over the block or blocks to which the identified greenhouse gas storage formation extends.

Multiple identified greenhouse gas storage formations

188. Subsections (3) and (4) provide that, if there are 2 or more identified greenhouse gas storage formations which together extend to only one block, the permittee may apply for a holding lease over that block. It makes no difference whether or not a horizontal line would pass through each of the storage formations, because only one block is affected and a block is the smallest area over which a greenhouse gas holding lease can be obtained.
189. Subsection (4) also provides that, if there are 2 or more identified greenhouse gas storage formations which together extend to 2 or more blocks and a vertical line would pass through each of the storage formations, the permittee may apply for a holding lease over those blocks.
190. Subsection (5) applies if there are 2 or more identified greenhouse gas storage formations which together extend to 2 or more blocks and a vertical line would not pass through each of the storage formations. Paragraph (5)(c) provides that if, for each identified greenhouse gas storage formation, at least one of the blocks to which the storage formation extends immediately adjoins a block to which the other, or another, storage formation extends, the permittee may apply for a holding lease over the blocks to which the storage formations together extend. The operation of subsection (5) is not confined to circumstances where none of the identified greenhouse gas storage formations horizontally overlaps another. The subsection applies whenever a single vertical line would not pass through all of the storage formations, even if some of them do overlap.
191. Subsection (6) provides that, for the purpose of subsection (5), blocks 'immediately adjoin' each other either if they have a side in common or if they meet at a point.
192. Subsection (7) requires that an applicant provide details of the applicant's proposals for work and expenditure, which the responsible Commonwealth Minister may incorporate into the conditions of the holding lease.
193. An application for a holding lease must be made within 12 months after the identified greenhouse gas storage formation was declared by the responsible Commonwealth Minister or, if there are 2 or more identified greenhouse gas storage formations, within 12 months after the first declaration was made.

Proposed section 249BI Grant of greenhouse gas holding lease—offer document

194. Proposed section 249BI applies where an application for a greenhouse gas holding lease has been made under proposed section 249BH. It sets out the criterion for the grant of a holding lease to the holder of a greenhouse gas assessment permit. The responsible Commonwealth Minister must be satisfied that the applicant is not, at the time, of the application, in a position to inject a greenhouse gas substance into the identified greenhouse gas storage formation, or in the case of an application in respect of multiple greenhouse gas storage formations, into each of the storage formations, but is likely to be in such a position within 15 years.
195. If the responsible Commonwealth Minister is satisfied of this, the Minister must give the applicant an offer document telling the applicant that the Minister is prepared to grant a greenhouse gas holding lease over the block or blocks specified in the application.

Proposed section 249BJ Refusal to grant greenhouse gas holding lease

196. Proposed section 249BJ provides that if the responsible Commonwealth Minister is not satisfied as required by proposed section 249BI, the Minister must refuse to grant the applicant a greenhouse gas holding lease.

Proposed section 249BK Grant of greenhouse gas holding lease

197. Proposed section 249BK provides that if an applicant who has been given an offer document under proposed section 249BI has made a request under proposed section 249JF for the grant of a holding lease and lodged any security required, in the amount and in the form required, the responsible Commonwealth Minister must grant the greenhouse gas holding lease.

Proposed section 249BL Greenhouse gas assessment permit ceases to be in force

198. Proposed section 249BL provides that when a greenhouse gas holding lease comes into force in relation to one or more blocks, a greenhouse gas assessment permit ceases to be in force in relation to that block or those blocks. (The greenhouse gas assessment permit will remain in force in relation to any other blocks in the permit area for the remainder of the term of the permit, unless it ceases to be in force for any reason under the Act.)

Subdivision B

Proposed section 249BN Application for greenhouse gas holding lease by the holder of a greenhouse gas injection licence

199. Proposed section 249BN provides for the holder of a greenhouse gas injection licence to apply for a holding lease over a block or blocks containing one or more identified greenhouse gas storage formations. The reason why an injection licensee might choose to revert to a greenhouse gas holding lease is that if an injection

licensee fails to carry out any injection and storage operations in the injection licence are for a continuous period of 5 years, the responsible Commonwealth Minister may cancel the injection licence. Reverting to a greenhouse gas holding lease will give the injection licensee more time to secure a supply of greenhouse gas substance for injection into the greenhouse gas storage formation or formations.

200. The application must be made within 5 years of the grant of the greenhouse gas injection licence.

Proposed section 249BO Grant of greenhouse gas holding lease—offer document

201. The criterion for the grant by the responsible Commonwealth Minister of a greenhouse gas holding lease to an injection licensee is that the applicant is not, at the time, of the application, in a position to inject a greenhouse gas substance into the identified greenhouse gas storage formation or formations, but is likely to be in a position to do so within 15 years.
202. The remaining provisions in proposed sections 249BP to 249BS in relation to the grant are the same as in proposed sections 249BJ to 249BM.

Subdivision C

Proposed section 249BSA Application for special greenhouse gas holding lease by an unsuccessful applicant for a greenhouse gas injection licence

203. Proposed section 249BSA applies where the holder of a greenhouse gas assessment permit or a greenhouse gas holding lease whose permit or lease area contains one or more identified greenhouse gas storage formations has applied for a greenhouse gas injection licence over the block or blocks containing the identified greenhouse gas storage formation(s) and the responsible Commonwealth Minister refuses to grant the injection licence for a reason relating to the risk of a significant adverse impact on petroleum operations under a petroleum title.
204. Proposed section 249BSA provides that, in these circumstances, the greenhouse gas assessment permittee or greenhouse gas holding lessee may, within the application period, apply to the responsible Commonwealth Minister for a special greenhouse gas holding lease over the relevant block or blocks. The application period is 90 days beginning on the day on which the permittee or lessee was notified of the refusal.

Proposed section 249BSB Grant of special greenhouse gas holding lease—offer document

205. Proposed section 249BSB provides that the responsible Commonwealth Minister must give the applicant an offer document telling the applicant that the Minister is prepared to grant the special greenhouse gas holding lease.

206. The remaining provisions in proposed sections 249BSC to 249BSFA in relation to the grant are the same as in proposed sections 249BJ to 249BM.

Division 3— Renewal of greenhouse gas holding lease

Proposed section 249BT Application for renewal of greenhouse gas holding lease

207. Proposed section 249BT provides for applications for renewal of a greenhouse gas holding lease (other than a special greenhouse gas holding lease, which is indefinite). A greenhouse gas holding lease may only be renewed once. Like the initial holding lease, a renewed holding lease has a duration of 5 years.
208. An application for renewal of a holding lease must be accompanied by details of the lessee's proposals for work and expenditure in relation to the lease area, which the responsible Commonwealth Minister may incorporate into the conditions of the holding lease.
209. Subsection (6) provides for an extension of the period of the lease if the lease would otherwise expire before the responsible Commonwealth Minister makes a decision on the application or before the application is taken to lapse under proposed section 249JF.

Proposed section 249BU Renewal of greenhouse gas holding lease—offer document

210. Proposed subsections 249BU(2) and (3) set out two alternative sets of circumstances and provide that, in those circumstance, the responsible Commonwealth Minister must, or may, respectively, grant the renewal of the greenhouse gas holding lease.
211. Subsection (2) provides that, if the applicant has, during the term of the initial lease, complied with the conditions of the initial lease and the applicable provisions of the Act and the regulations, and if the responsible Commonwealth Minister is satisfied that the applicant is not, at the time, of the application, in a position to inject a greenhouse gas substance into the identified greenhouse gas storage formation or formations, but is likely to be in a position to do so within 15 years, the responsible Commonwealth Minister must give the applicant an offer document.
212. Subsection (3) provides that, if any of the conditions of the initial lease or of the applicable provisions of the Act and the regulations have not been complied with, but the responsible Commonwealth Minister is satisfied that there are sufficient grounds to warrant the grant of the renewal of the lease, and the responsible Commonwealth Minister is satisfied as set out above in relation to injection of a greenhouse gas into the storage formation, the responsible Commonwealth Minister may give the applicant an offer document.

Proposed section 249BV Refusal to renew greenhouse gas holding lease

213. Proposed section 249BV sets out circumstances in which the responsible Commonwealth Minister must refuse to grant a renewal of a greenhouse gas holding lease.
214. Subsection (2) provides that, if any of the conditions of the initial lease or of the applicable provisions of the Act or the regulations have not been complied with, and the responsible Commonwealth Minister is not satisfied that there are sufficient grounds to warrant the grant of the renewal of the lease, the responsible Commonwealth Minister must refuse to renew the lease.
215. Subsection (3) provides that, if the responsible Commonwealth Minister is satisfied that the applicant is, at the time of the application, in a position to inject and store a greenhouse gas substance into the identified greenhouse gas storage formation or formations, the responsible Commonwealth Minister must refuse to renew the lease.
216. Subsections (4) and (5) provide for the continuation in force of the applicant's holding lease after the date when it would otherwise have expired, in a case where the responsible Commonwealth Minister refuses to grant a renewal under subsection (3).

Proposed section 249BW Renewal of greenhouse gas holding lease

217. Proposed section 249BW provides that if an applicant who has been given an offer document under proposed section 249BU and has made a request under proposed section 249JF for the grant of a holding lease and lodged any security required, in the amount and in the form required, the responsible Commonwealth Minister must grant the renewal of the greenhouse gas holding lease.

Division 4—Directions

Proposed section 249BZ Responsible Commonwealth Minister may give directions

218. Proposed section 249BZ confers power on the responsible Commonwealth Minister to give a greenhouse gas holding lessee a direction for the purpose of eliminating, mitigating or managing the risk that operations under the lease could have a significant adverse impact on operations under an existing or future petroleum title. The responsible Commonwealth Minister can give a direction under this section whether or not there is a petroleum title in existence over the relevant blocks. A direction can therefore be given to protect potential petroleum acreage that has not yet been released.

Section 249BZA Compliance with directions

219. Proposed subsection 249BZA(1) makes it an offence to fail to comply with a direction under section 249BZ. Subsection (2) provides that an offence against subsection (1) is an offence of strict liability. The offence created by the statutory

obligation in this section could be difficult to establish if the prosecution were required to prove intention with respect to an omission to do the things required. Accordingly, an obligation of this type is usually imposed by the legislature with the intention that strict liability should apply.

Part 2A.4—Greenhouse gas injection licences

220. A greenhouse gas injection licence is the injection and storage project licence. It authorises the injection and storage of a greenhouse gas substance in one or more identified greenhouse gas storage formations that are wholly situated in the licence area.
221. The injection licence authorises injection and storage operations in accordance with the specifications that were set out in the declaration of the identified greenhouse gas storage formation. That declaration will have been updated (ie varied) as necessary to take account of any new information about the characteristics of the storage formation or any changes in the current title-holder's proposed operations, and can be further varied during the term of the injection licence. The specifications in the declaration become part of the injection licence by being attached as licence conditions. If the declaration is varied during the term of the injection licence, the licence will also be varied so that the two remain consistent.
222. An injection licence remains in force until injection operations have ceased, the site closing work program has been completed by the licensee, the licensee has lodged any required security for the ongoing monitoring program and the responsible Commonwealth Minister has granted a site closing certificate. At that point, the licensee has no further statutory responsibility in relation to the stored greenhouse gas substance and can abandon the site.

Role of site plan

223. An applicant for an injection licence must submit a draft site plan for assessment by the responsible Commonwealth Minister. A decision by the responsible Commonwealth Minister that the draft site plan meets requirements is an important part of the process for granting the injection licence. The regulations will set out the matters that must be covered by the site plan and the objectives that it must meet. The regulations relating to site plans will be modelled on existing 'objective-based' regulations under the *Offshore Petroleum Act 2006* such as the *Offshore Petroleum (Management of Safety on Offshore Facilities) Regulations 1996*.
224. The site plan is the core regulatory document for each project and will form the basis for the day-to-day regulatory interaction between the injection licensee and the regulator (the delegate of the responsible Commonwealth Minister). The site plan will keep the regulator informed, at an appropriate level of detail, of:
- the geological attributes or features of the storage formation;
 - current and proposed injection and storage operations;

- the operations and techniques to be used by the licensee to monitor and verify the behaviour of the greenhouse gas over the life of the project.
 - operations management systems, including processes for identification, assessment and management of risks; and
 - predictions as to the short, medium and long term behaviour and fate of the greenhouse gas in the identified storage formation and associated geological formation(s).
225. The regulations will prohibit the carrying out of any activity under the authority of the injection licence unless a site plan is in force under the regulations and unless the activity is carried out in accordance with the site plan. The site plan will be required by the regulations to be updated periodically and also whenever there is a material change in the level or kind of risk.

Proposed section 249CC Prohibition of unauthorised injection and storage of substances in offshore area

226. Proposed section 249CC makes it an offence to inject or store a substance in the seabed or subsoil in an offshore area unless that injection or storage is authorised by a greenhouse gas injection licence or is otherwise authorised or required by or under the *Offshore Petroleum Act 2006*.

Division 1—General provisions

Proposed section 249CD Rights conferred by greenhouse gas injection licence

227. Subsection 249CD(1) provides that a greenhouse gas injection licence authorises the licensee to inject and store a greenhouse gas substance in an identified greenhouse gas storage formation that is wholly situated in the licence area. The injection must take place at a well situated in the licence area. This requires, in relation to the injection well, that the top of the hole in the seabed must be in the injection licence area and that the point at which the well enters the greenhouse gas storage formation must be in the injection licence area. Proposed section 249CD does not permit injection operations by means of an inclined well, as paragraph 137(b) permits in the case of petroleum recovery operations. Proposed section 249CD does not impose any requirement as to the location of the valves and other equipment by means of which the flow of greenhouse gas substance into the well is controlled and which may be regarded as part of the well. The location of such equipment will depend on the licensee's own operations. Injection of a greenhouse gas substance takes place as the greenhouse gas substance enters the top of the hole in the seabed, not at any earlier point where the pumping or compression may take place that causes it to enter the well.
228. Subsection 249CD(1) also confers the same powers with respect to exploration as are conferred by a greenhouse gas assessment permit and a greenhouse gas holding lease. There is an important difference, however, in that there is no requirement on a

greenhouse gas injection licensee to obtain the approval of the responsible Commonwealth Minister to the carrying out of 'key greenhouse gas operations'.

229. Subsection (2) provides that the rights conferred by subsection (1) are subject to the Act and the regulations. This refers to (among other things) the requirements under the regulations that must be complied with, and other regulatory approval processes that need to be gone through, before actual injection activity, or even construction of injection infrastructure, may commence. For example, no activity can be commenced unless there is an environment plan in force under the regulations that covers the activity and in the case of drilling an injection well, a range of regulatory approvals would have to be obtained.

Proposed section 249CE Conditions of greenhouse gas injection licence

230. Proposed section 249CE provides that the responsible Commonwealth Minister may grant a greenhouse gas injection licence subject to whatever conditions the responsible Commonwealth Minister thinks appropriate. The conditions must be specified in the licence, except for certain conditions imposed by the section itself which do not have to be specified in the licence. The condition imposed by subsection (3) does have to be set out in the licence, including the particular specifications for each greenhouse gas storage formation. This means that the particular specifications for each greenhouse gas storage formation in an injection licence area will be publicly available, because they will appear in the Register of greenhouse gas titles.

Injection and storage of greenhouse gas substance

231. Subsection (3) imposes the condition that gives effect to the fundamental suitability determinants and other matters specified in the declaration of the identified greenhouse gas storage formation. The condition requires the injection licensee to carry out injection and storage operations under the licence consistently with the specifications in the declaration. The condition requires, in relation to each identified greenhouse gas storage formation in the licence area, that:
- the identified greenhouse gas storage formation is as 'specified' in the licence (the 'specification' being a description of the storage formation, including the spatial extent);
 - the greenhouse gas substance is of a kind specified in the licence;
 - the greenhouse gas substance complies with any requirements specified in the licence;
 - the origin or origins of the greenhouse gas substance are as specified in the licence;
 - the greenhouse gas substance is injected at the site or sites specified in the licence;

- the greenhouse gas substance is injected during a period specified in the licence;
 - the amount of greenhouse gas substance already injected together with the amount proposed to be injected does not exceed the total specified in the licence;
 - the rate, or range of rates, of injection of the greenhouse gas substance is as specified in the licence.
232. Subsection (4) is the provision that 'staples' the injection licence to the declaration of the identified greenhouse gas storage formation. It requires that the matters specified in the licence as required above not be inconsistent with the fundamental suitability determinants in the declaration.
233. Because the matters set out above must be specified in the licence in relation to each identified greenhouse gas storage formation in the licence area, it means that injection and storage operations in relation to each storage formation must be compliant. For example, the injection rate or range of rates and the injection period (including the starting date) must be as specified in the licence. Therefore, if there is non-compliance in relation to a single storage formation in a multi-storage formation licence area, the licensee will be in breach of the licence condition even if the specifications of operations in the licence area as a whole are within the required parameters. A licensee who is unable to comply fully in relation to a storage formation in the licence area will be able to seek a variation of the declaration that was made in relation to the storage formation. If the responsible Commonwealth Minister is prepared to make the variation, the licence also will be varied so that the two instruments are consistent.

Securities

234. Subsection (9) makes it a statutory condition of an injection licence that, if the responsible Commonwealth Minister at any time, under proposed section 249NCA, requires the licensee to provide security, or to top-up any security previously provided, the licensee will provide the security or additional security.

Access regime

235. Part IIIA of the *Trade Practices Act 1974* establishes a regime of compulsory third party access to services provided by means of infrastructure facilities. The question whether that regime was applicable to a particular identified greenhouse gas storage formation, or infrastructure used for injection and storage operations or related operations, would have to be answered in light of the particular circumstances of the injection and storage project. If, for any reason, Part IIIA of the *Trade Practices Act* did not apply to injection and storage infrastructure, it might be considered desirable to establish a specialised third party access regime by regulations under the *Offshore Petroleum Act*. Subsections (10) and (11) make it a statutory condition of a greenhouse gas injection licence that the licensee will comply with such a regime.

Other conditions

236. Subsection (12) enables the responsible Commonwealth Minister to vary an injection licence by imposing one or more additional conditions.

Proposed section 249CF Duration of greenhouse gas injection licence

237. A greenhouse gas injection licence remains in force indefinitely, ie for the life of the project. Where injection and storage operations have been carried on under the injection licence, the licence will remain in force until injection operations have ceased, the site closing work program has been completed by the licensee, the licensee has lodged any required security for the ongoing monitoring program and the responsible Commonwealth Minister has granted a site closing certificate. Injection operations may cease for a number of reasons, including that the responsible Commonwealth Minister has directed the licensee to cease injection and to apply for a site closing certificate.

Proposed section 249CG Termination of greenhouse gas injection licence if no injection operations for 5 years

238. Proposed section 249CG provides that, if no operations for the injection and storage of a greenhouse gas substance have been carried on in an injection licence area for a period of 5 years, the responsible Commonwealth Minister may, after the expiry of the notice period and having carried out the consultation process required by the section, terminate the licence. This provision corresponds to section 140 of the Offshore Petroleum Act, which provides for termination of a petroleum production licence if no petroleum production operations have been carried on in the licence area for a period of 5 years.

Division 2—Obtaining a greenhouse gas injection licence

Subdivision A—Application for greenhouse gas injection licence by the holder of a greenhouse gas assessment permit or greenhouse gas holding lease

Proposed section 249CH Application by greenhouse gas assessment permittee or greenhouse gas holding lessee

239. Proposed section 249CH provides for the making of an application for a greenhouse gas injection licence by the holder of a greenhouse gas assessment permit or greenhouse gas holding lease who has one or more identified greenhouse gas storage formations wholly located in the permit or lease area. This section sets out the rules for determining whether multiple storage formations are to be covered by a single injection licence or whether multiple injection licences are to be obtained. Generally speaking, the outcome depends on whether there is horizontal overlapping of the storage formations or, if there is no horizontal overlapping, whether the storage formations extend to the same block or to blocks that have a side or a corner point in common. Otherwise, a separate injection licence is to be obtained.

Single identified greenhouse gas storage formation

240. Subsection (2) provides that, if there is a single identified greenhouse gas storage formation, the permittee or lessee may apply for an injection licence over the block or blocks to which the identified greenhouse gas storage formation extends.

Multiple identified greenhouse gas storage formations

241. Subsections (3) and (4) provide that, if there are 2 or more identified greenhouse gas storage formations which together extend to only one block, the permittee or lessee may apply for an injection licence over that block. It makes no difference whether or not a horizontal line would pass through each of the storage formations, because only one block is affected and a block is the smallest area over which a greenhouse gas injection licence can be obtained.
242. Subsection (4) also provides that, if there are 2 or more identified greenhouse gas storage formations which together extend to 2 or more blocks and a vertical line would pass through each of the storage formations, the permittee or lessee may apply for an injection licence over those blocks.
243. Subsection (5) applies if there are 2 or more identified greenhouse gas storage formations which together extend to 2 or more blocks and a vertical line would not pass through each of the storage formations. Paragraph (5)(c) provides that if, for each identified greenhouse gas storage formation, at least one of the blocks to which the storage formation extends immediately adjoins a block to which the other, or another storage formation extends, the permittee or lessee may apply for an injection licence over the blocks to which the storage formations together extend. The operation of subsection (5) is not confined to circumstances where none of the identified greenhouse gas storage formations horizontally overlaps another. The subsection applies whenever a single vertical line would not pass through all of the storage formations, even if some of them do overlap.
244. Subsection (6) provides that, for the purpose of subsection (5), blocks 'immediately adjoin' each other either if they have a side in common or if they meet at a point.

Application

245. Subsection (7) and (8) require that the application set out matters corresponding to, and consistent with, the fundamental suitability determinants in the declaration of the identified greenhouse gas storage formation.
246. Subsection (9) requires that an application set out (among other things) a draft site plan. A decision by the responsible Commonwealth Minister that the draft site plan meets requirements is an important part of the process for granting the injection licence. The regulations will set out the matters that must be covered by the site plan and the objectives that it must meet.

Proposed section 249CI Offer document

247. Subsections (1) and (2) of proposed section 249CI make identical provision for the decision to be made by the Minister on an application for a greenhouse gas injection licence. The only difference is that subsection (1) applies where the applicant is a greenhouse gas assessment permittee and subsection (2) applies where the applicant is a greenhouse gas holding lessee.
248. The subsections provide in each case that, if the responsible Commonwealth Minister is satisfied as to the matters set out in the subsection, the Minister must grant an injection licence to the applicant. The matters as to which the Minister must be satisfied relate primarily to the potential for significant adverse impacts on existing and future petroleum operations. Broadly, the same levels of protection are applied as is the case when the responsible Commonwealth Minister approves key greenhouse gas operations – for post-commencement petroleum titles the public interest test is applied and for pre-commencement petroleum titles and existing production licences, the 'no significant negative impact' test is applied unless there is agreement of the petroleum title-holder.
249. Under paragraph (b), the responsible Commonwealth Minister must be satisfied that, if the licence is granted, the applicant will commence injection and storage of a greenhouse gas substance in at least one identified greenhouse gas storage formation in the licence area within 5 years.
250. Under paragraph (c), if the responsible Commonwealth Minister is satisfied that there is a significant risk of a significant adverse impact on petroleum operations under an existing post-commencement exploration permit or retention lease, or under a future post-commencement production licence in the same series as an existing exploration permit or retention lease, the Minister must be satisfied that the grant of the greenhouse gas injection licence is in the public interest.
251. Under paragraph (d), if the responsible Commonwealth Minister is satisfied that there is a significant risk of a significant adverse impact on petroleum operations under an existing pre-commencement petroleum title, or under an existing post-commencement production licence, held by a person other than the applicant, the responsible Commonwealth Minister must be satisfied that the holder of the petroleum title has agreed in writing to the grant of the injection licence and that the agreement either has been approved for registration in the Registers maintained under the Act or is reasonably likely to be so approved.
252. Paragraph (e) makes the same provision in relation to a future pre-commencement petroleum title, except that the agreement must be between the applicant for the greenhouse gas injection licence and the holder of the existing pre-commencement petroleum title.
253. A special test is applied where the proposed injection licence area overlaps a pre-commencement petroleum title or a production licence area. If there is known to be

commercial petroleum in the area of the overlap, the responsible Commonwealth Minister must be satisfied that there will be no significant adverse impact. The difference in this case is that the petroleum title-holder cannot agree to the grant of the injection licence, where there is a risk to the petroleum. The public interest in the development of the petroleum resource is paramount.

254. Under paragraph (g) the responsible Commonwealth Minister must be satisfied that the applicant's technical and financial resources are adequate, having regard to the nature and scale of the applicant's proposed operations, and under paragraph (h) that the draft site plan satisfies the criteria specified in the regulations.

Proposed section 249CJ Refusal to grant greenhouse gas injection licence

255. Proposed section 249CJ provides that, where the applicable requirements of section 249CI are not met, the Minister must refuse to grant the injection licence.

Proposed section 249CJA Grant of greenhouse gas injection licence

256. Proposed section 249CJA provides that if an applicant who has been given an offer document under proposed section 249CI and has made a request under proposed section 249JF for the grant of an injection licence and lodged any security required, in the amount and in the form required, the responsible Commonwealth Minister must grant the greenhouse gas injection licence.

Proposed section 249CK Deferral of decision to grant greenhouse gas injection licence—pending application for post-commencement exploration permit

257. Proposed section 249CK deals with the situation where an application is made for a greenhouse gas injection licence and, at the time when the application is made, there is already an application for a post-commencement exploration permit being considered by the Joint Authority. In such a case, the responsible Commonwealth Minister's decision-making process may be different according to whether the petroleum exploration permit is, or is not, in existence at the time when the decision on the injection licence is made. The section provides that the responsible Commonwealth Minister may make a decision in the public interest to defer the decision on the grant of the injection licence until the decision on the petroleum exploration permit has been finalised by one means or another.

Subdivision B—Application for greenhouse gas injection licence by the holder of a production licence

Proposed section 249CQ Application by the holder of a production licence

258. Proposed section 249CQ applies where a petroleum production licensee has obtained from the responsible Commonwealth Minister a declaration of one or more identified greenhouse gas storage formations wholly situated within the production licence area. The production licensee may apply for an injection licence over the relevant

block or blocks, provided that there is not already a greenhouse gas title in force over that block or those blocks.

259. The section sets out the rules for determining whether multiple storage formations are to be covered by a single injection licence or whether multiple injection licences are to be obtained. Generally speaking, the outcome depends on whether there is horizontal overlapping of the storage formations or, if there is no horizontal overlapping, whether the storage formations extend to the same block or to blocks that have a side or a corner point in common. Otherwise, a separate injection licence is to be obtained.

Single identified greenhouse gas storage formation

260. Subsection (2) provides that, if there is a single identified greenhouse gas storage formation, the permittee or lessee may apply for an injection licence over the block or blocks to which the identified greenhouse gas storage formation extends.

Multiple identified greenhouse gas storage formations

261. Subsections (3) and (4) provide that, if there are 2 or more identified greenhouse gas storage formations which together extend to only one block, the permittee or lessee may apply for an injection licence over that block. It makes no difference whether or not a horizontal line would pass through each of the storage formations, because only one block is affected and a block is the smallest area over which a greenhouse gas injection licence can be obtained.
262. Subsection (4) also provides that, if there are 2 or more identified greenhouse gas storage formations which together extend to 2 or more blocks and a vertical line would pass through each of the storage formations, the permittee or lessee may apply for an injection licence over those blocks.
263. Subsection (5) applies if there are 2 or more identified greenhouse gas storage formations which together extend to 2 or more blocks and a vertical line would not pass through each of the storage formations. Paragraph (5)(c) provides that if, for each identified greenhouse gas storage formation, at least one of the blocks to which the storage formation extends immediately adjoins a block to which the other, or another storage formation extends, the permittee or lessee may apply for an injection licence over the blocks to which the storage formations together extend. The operation of subsection (5) is not confined to circumstances where none of the identified greenhouse gas storage formations horizontally overlaps another. The subsection applies whenever a single vertical line would not pass through all of the storage formations, even if some of them do overlap.
264. Subsection (6) provides that, for the purpose of subsection (5), blocks 'immediately adjoin' each other either if they have a side in common or if they meet at a point.

Application

265. Subsection (7) and (8) require that the application set out matters corresponding to, and consistent with, the fundamental suitability determinants in the declaration of the identified greenhouse gas storage formation.
266. Subsection (9) requires that an application set out (among other things) a draft site plan. A decision by the responsible Commonwealth Minister that the draft site plan meets requirements is an important part of the process for granting the injection licence. The regulations will set out the matters that must be covered by the site plan and the objectives that it must meet.

Proposed section 249CR Grant of greenhouse gas injection licence—offer document

267. Proposed section 249CR applies where a petroleum production licensee has made an application for a greenhouse gas injection licence under proposed section 249CQ. There is an important difference between the circumstances in which a petroleum production licensee applies for a greenhouse gas injection licence under this section and those in which a greenhouse gas assessment permittee or a greenhouse gas holding lessee applies for an injection licence under proposed section 249CH. The difference is that the petroleum production licensee has not had to compete with other applicants for the blocks over which the injection licence is sought. By contrast, a greenhouse gas title-holder will have had to compete via a work program bid for the initial assessment permit over the blocks. In order to maintain competitive neutrality between petroleum production licensees and greenhouse gas permit and lease-holders, it is considered appropriate that there be some restriction on the operations that can be carried on under an injection licence granted under this section. That restriction is in paragraph (c). There is a further important difference between this section and section 249CI in that, even if all of the requirements in this section are satisfied, the responsible Commonwealth Minister does not have to grant an injection licence. The Minister has a discretion as to whether to give an offer document to the applicant.
268. The section sets out the matters as to which the responsible Commonwealth Minister must be satisfied in order to grant the injection licence.
269. Under paragraph (b), the responsible Commonwealth Minister must be satisfied that, if the licence is granted, the applicant will commence injection and storage of a greenhouse gas substance in at least one identified greenhouse gas storage formation in the licence area within 5 years.
270. Paragraph (c), which is applicable only to applications under this section, requires the responsible Commonwealth Minister to be satisfied that all of the greenhouse gas substance injected into the identified greenhouse gas storage formation will be obtained as a by-product of petroleum recovery operations carried on under the production licence. This does not extend to by-product greenhouse gas sourced from

other petroleum title areas, even those held by the same person. This ensures that a petroleum production licensee's concessional access to a greenhouse gas injection licence does not give an unfair competitive advantage to the petroleum industry when entering the greenhouse gas injection and storage industry.

271. Paragraph (d) provides that, if the responsible Commonwealth Minister is satisfied that there is a significant risk of a significant adverse impact on petroleum operations under an existing post-commencement exploration permit or retention lease, or under a future post-commencement production licence in the same series as an existing exploration permit or retention lease, the Minister must be satisfied that the grant of the greenhouse gas injection licence is in the public interest or that the petroleum title-holder has agreed to the grant of the injection licence.
272. Under paragraph (e), if the responsible Commonwealth Minister is satisfied that there is a significant risk of a significant adverse impact on petroleum operations under an existing pre-commencement petroleum title held by a person other than the applicant, the responsible Commonwealth Minister must be satisfied that the holder of the petroleum title has agreed in writing to the grant of the injection licence.
273. Paragraph (f) makes the same provision in relation to a future pre-commencement petroleum title, except that the agreement must be between the applicant for the greenhouse gas injection licence and the holder of the existing pre-commencement petroleum title.
274. Under paragraph (g) the responsible Commonwealth Minister must be satisfied that the applicant's technical and financial resources are adequate, having regard to the nature and scale of the applicant's proposed operations, and under paragraph (h) that the draft site plan satisfies the criteria specified in the regulations.
275. Under paragraph (g), if the responsible Commonwealth Minister is satisfied that there is a significant risk of a significant adverse impact on petroleum operations under another existing production licence held by a person other than the applicant, the responsible Commonwealth Minister must be satisfied that the holder of the other production licence has agreed to the grant of the injection licence.
276. Under paragraph (h) the responsible Commonwealth Minister must be satisfied that the applicant's technical and financial resources are adequate, having regard to the nature and scale of the applicant's proposed operations, and under paragraph (i) that the draft site plan satisfies the criteria specified in the regulations.

Proposed section 249CRB Grant of greenhouse gas injection licence

277. Proposed section 249CRB provides that if an applicant who has been given an offer document under proposed section 249CR has made a request under proposed section 249JF for the grant of an injection licence and lodged any security required, in the amount and in the form required, the responsible Commonwealth Minister must grant the greenhouse gas injection licence.

Division 3—Variations

Proposed section 249CT Variation of matters specified in greenhouse gas injection licence—General

278. Proposed section 249CT enables a greenhouse gas injection licensee to apply to the responsible Commonwealth Minister for a variation of the specification (ie description) in the licence of the identified greenhouse gas storage formation or of one of the matters corresponding to the fundamental suitability determinants. The responsible Commonwealth Minister has a discretion as to whether to make the variation. If the Minister varies the licence, the varied matter must not be inconsistent with the fundamental suitability determinants in the declaration of the identified greenhouse gas storage formation. The effect of this requirement is that if an injection licensee wishes to vary a matter in the licence in a way that would make the licence inconsistent with the fundamental suitability determinants in the declaration of the identified greenhouse gas storage formation, the licensee will have to seek a variation to the declaration.

Proposed section 249CTA Variation of matters specified in greenhouse gas injection licence—Declaration of identified greenhouse gas storage formation varied

279. Proposed section 249CTA is another provision that 'staples' the injection licence to the declaration of the identified greenhouse gas storage formation. The section provides that, if the responsible Commonwealth Minister varies the identified greenhouse gas storage formation so that it is inconsistent with the injection licence, the responsible Commonwealth Minister must vary the injection licence to make it consistent.

Division 4—Directions

280. The directions that the responsible Commonwealth Minister may give to a greenhouse gas injection licensee under this Division are in some respects much more extensive than the Designated Authority can give to a petroleum title-holder. This is because of the potential need to deal with the risk that a greenhouse gas substance injected and stored under the injection licence will or may cause loss or damage to the environment, other resources or the interests of other persons or of the community.

Proposed section 249CXA Responsible Commonwealth Minister may give directions to protect geological formations containing petroleum pools

281. Proposed section 249CXA enables the responsible Commonwealth Minister to give a direction to an injection licensee for the purpose of eliminating, mitigating or managing the risk that operations under the injection licence could have a significant adverse impact on a geological formation that contains petroleum or otherwise compromise the exploitation of any petroleum. For example, the drilling of a well by the injection licensee might break the geological seal holding an accumulation of

petroleum in place, or it might so reduce pressure in the geological formation that the petroleum became irrecoverable, or not commercially viable to recover.

282. A direction may require the licensee to do something inside or outside the licence area. This power to require the licensee to do something outside the licence area is a new feature introduced by this Bill and is specific to greenhouse gas licensees.
283. A direction under this section has effect and must be complied with despite anything in the regulations or in the applied (State or NT) laws, or in the approved site plan or in the injection licence. In the case of a direction inconsistent with the licence, the responsible Commonwealth Minister may vary licence to remove the inconsistency. In the case of an inconsistency with the site plan, the licensee must submit a proposed variation of the site plan for the approval of the responsible Commonwealth Minister.

Proposed section 249CXB Consultation—Direction to do something outside the licence area

284. Proposed section 249CXB sets up a consultation process in a case where a direction under section 249CXA requires an injection licensee to do something outside the injection licence area in an area over which another person holds a greenhouse gas title.

Division 5—Dealing with serious situations

285. This Division is the source of the responsible Commonwealth Minister's principal regulatory powers for dealing with circumstances where injection and storage operations do not go as planned and there are, or may be, serious consequences. In most cases, there is no requirement that the responsible Commonwealth Minister identify any particular risk to the environment, other resources or the interests of other persons or of the community. It is enough that something has happened, or there is a significant risk that something will happen, that was not foreseen or for which there are not approved contingency plans in place or for which the plans in place may prove inadequate. The occurrence, or potential occurrence, may be such as to indicate that the storage formation is not in fact suitable as a site for the licensee's injection and storage operations, so that the licensee must cease operations, as well as taking any precautionary or remedial action that the Minister requires.
286. The responsible Commonwealth Minister is given a very broad range of powers for dealing with serious situations. The expectation is that the Minister will in each case take the least 'drastic' action that will deal with the situation to the Minister's satisfaction.

Proposed section 249CZ Serious situation

287. Proposed section 249CZ lists the circumstances in which a 'serious situation' is considered to exist. Under paragraphs (1)(a) and (b), these include that an injected

greenhouse gas substance has leaked or is leaking or that there is a significant risk that it will leak, from the identified greenhouse gas storage formation. (This refers to the injected greenhouse gas substance migrating outside the expected migration path. It does not necessarily mean that there is a risk of leakage into the atmosphere or into a place where there is potential damage to a resource, although these would of course be included.)

288. Paragraphs (1)(c) and (d) list the circumstances that the greenhouse gas substance has leaked, or is leaking, or that there is a significant risk of it leaking, in the course of being injected into the greenhouse gas storage formation.
289. Paragraphs (1)(e) and (f) list circumstances of the greenhouse gas substance behaving otherwise than as predicted in the site plan. There may be no identifiable risk attaching to these circumstances. But it means that the licensee's predictions have been wrong, and that there will at least have to be a review by the licensee of the available information to ascertain whether the mistake was a material one, and if so, a revision to the site plan or a modification to the licensee's operations, to the satisfaction of the responsible Commonwealth Minister.
290. Paragraphs (1)(g) and (h) list circumstances of the injection and storage of the greenhouse gas substance having a significant adverse impact on the geotechnical integrity of the geological formation or geological structure of which the identified greenhouse gas storage formation forms a part. For example, the greenhouse gas substance may react chemically with the rock that forms the storage formation in a manner that impacts adversely on the storage capacity of the formation. Or there may be an unexpected build-up of pressure at a particular point.
291. Finally, paragraph (1)(i) lists the circumstance that the identified greenhouse gas storage formation turns out not to be 'suitable' for the injection and storage of the particular amount of the particular greenhouse gas substance set out in the declaration of the identified greenhouse gas storage formation, if injected at the point(s) and over the period set out in the declaration.

Proposed section 249CZA Powers of the responsible Commonwealth Minister to deal with serious situations

292. Proposed section 249CZA sets out the range of powers available to the responsible Commonwealth Minister where the Minister is satisfied that one of the situations listed in proposed section 249CZ exists. With one exception, the powers are expressed in very general terms, because the actions that the injection licensee might be directed to take, or refrain from taking, will depend on the particular operations and the particular circumstances. The greenhouse gas injection and storage industry is a very new industry. The technological processes involved, the conditions that might be encountered within geological formations, perhaps 30 or 40 years from now, must be dealt with legislatively in broad terms so as to enable the regulator to take the most appropriate and effective action when the time comes.

293. The one exception to the general drafting of the powers is in paragraph (1)(d). This is merely an example of the actions that the responsible Commonwealth Minister might require the injection licensee to undertake. Where the problem that has arisen is that there has been a build-up of pressure at a point in the storage formation that might not be capable of withstanding it, the remedy might be to inject a greenhouse gas substance or another substance such as air or water on one side or other of the weak point. Alternatively, the remedy might be to recover some of the stored greenhouse gas.
294. A direction may require the licensee to do something inside or outside the licence area. This power to require the licensee to do something outside the licence area is a new feature introduced by this Bill and is specific to greenhouse gas licensees. A possible example of the kinds of action that an injection licensee might be directed to take outside the licence area is to plug an old petroleum well, perhaps drilled by a petroleum explorer under a now defunct title, that is now found to be in one of the potential migration paths of the stored greenhouse gas.
295. A direction under this section has effect and must be complied with despite anything in the regulations or in the applied (State or NT) laws, or in the approved site plan or in the injection licence. In the case of a direction inconsistent with the licence, the responsible Commonwealth Minister may vary licence to remove the inconsistency. In the case of an inconsistency with the site plan, the licensee must submit a proposed variation of the site plan for the approval of the responsible Commonwealth Minister.

Proposed section 249CZAA Consultation—Direction to do something outside the licence area

296. Proposed section 249CZAA sets up a consultation process in a case where a direction under section 249CZA requires an injection licensee to do something outside the injection licence area in an area over which another person holds a greenhouse gas title.

Division 6—Protection of petroleum discovered in the title area of a pre-commencement petroleum title

Proposed section 249CZC Powers of responsible Commonwealth Minister to protect petroleum discovered in the title area of a pre-commencement petroleum title

297. Subsections (1) and (2) of proposed section 249CZC are in similar terms, except that subsection (1) applies where the responsible Commonwealth Minister is satisfied that it is practicable to eliminate the risk to the recovery of the petroleum and subsection (2) applies where the responsible Commonwealth Minister is satisfied that it is not practicable to eliminate the risk.

298. Subsection (1) applies where a greenhouse gas injection licence overlaps in whole or in part a pre-commencement petroleum title and there is a discovery of commercial, or potentially commercial, petroleum in the area of the overlap. The subsection provides that, if the responsible Commonwealth Minister is satisfied that there is a significant risk that injection and storage operations under the injection licence will have a significant adverse impact on the recovery of the petroleum and the petroleum title-holder has not agreed to the injection and storage operations going ahead, the Minister must give a direction to the injection licensee for the purpose of eliminating the risk, or suspend any or all of the rights under the injection licence or cancel the injection licence.
299. Subsection (2) is in the same terms, except that the direction must be given for the purpose of mitigating, managing or remediating the risk.
300. A direction may require the licensee to do something inside or outside the licence area. This power to require the licensee to do something outside the licence area is a new feature introduced by this Bill and is specific to greenhouse gas licensees.
301. A direction under this section has effect and must be complied with despite anything in the regulations or in the applied (State or NT) laws, or in the approved site plan or in the injection licence. In the case of a direction inconsistent with the licence, the responsible Commonwealth Minister may vary licence to remove the inconsistency. In the case of an inconsistency with the site plan, the licensee must submit a proposed variation of the site plan for the approval of the responsible Commonwealth Minister.

Proposed section 249CZCA Consultation—Direction to do something outside the licence area

302. Proposed section 249CZCA sets up a consultation process in a case where a direction under section 249CZC requires an injection licensee to do something outside the injection licence area in an area over which another person holds a greenhouse gas title.

Division 7—Site closing certificates

303. The site closing process begins when all injection and storage operations in the licence area have ceased. At that time, the licensee is required to apply for a site closing certificate. The making of that application is the trigger for the operation of section 316-311A, which confers direction-giving powers on the responsible Commonwealth Minister. Under section 316-311A, the Minister can direct the injection licensee to carry out whatever work is necessary to ensure that the responsible Commonwealth Minister will be able to issue a site-closing certificate.
304. The work that an injection licensee can be directed to carry out goes well beyond the work that a petroleum production licensee can be directed to carry out at the decommissioning stage of a petroleum project. As well as directing the plugging of

wells and restoration of the seabed and removal of structures and equipment, the responsible Commonwealth Minister can direct a greenhouse gas injection licensee to carry out work for the purpose of ensuring that the injected greenhouse gas substance does not, in the future, cause damage to the environment or other resources or cause injury or loss to other users of the sea or risk to the health and safety of the offshore workforce.

305. For this purpose, the licensee can be directed to carry out work on the storage formation within the licence area and also on geological formations or structures into which the greenhouse gas substance is expected to migrate in the future, after the site closing certificate has been granted and the injection licensee has been permitted to vacate the site. This may include the plugging of old abandoned petroleum wells outside the injection licence area that might otherwise enable the injected greenhouse gas substance to migrate to the surface or to contaminate other natural resources of the sea, seabed or subsoil.
306. The site closing work program will also include extensive monitoring, measurement and verification of the behaviour of the injected greenhouse gas in the storage formation. The purpose of this is to enable the responsible Commonwealth Minister to achieve sufficient confidence about the likely fate of the injected greenhouse gas that the Minister can grant a site closing certificate to the licensee.

Proposed section 249CZE Application for site closing certificate

307. An injection licensee who has injected a greenhouse gas substance into one or more identified greenhouse gas storage formations in the licence area must apply for a site closing certificate when injection operations in the whole licence area have ceased permanently. The application must be accompanied by a written report setting out:
- the licensee’s modelling of the behaviour of the greenhouse gas and relevant information and analysis; and
 - the licensee’s assessment of the expected migration pathway(s) and short and long term consequences of the migration; and
 - the licensee’s suggestions for the post site-closing program of monitoring and verification by the Commonwealth, the cost of which will be paid by the licensee prior to receiving the site closing certificate.

Proposed section 249CZF Issue of site closing certificate—Pre-certificate notice

308. See the clause note to section 249CZFA for the likely order of events.
309. Proposed section 249CZF sets out the matters to which the responsible Commonwealth Minister must have regard when making the decision whether to grant a site closing certificate, the circumstances in which a certificate may be refused and the circumstances in which a certificate must not be given. The section does not limit the matters to which the responsible Commonwealth Minister may have regard when making the decision.

Responsible Commonwealth Minister must have regard to certain matters

310. Subsection (2) requires the responsible Commonwealth Minister to have regard to any significant risk that he considers exists that the injected greenhouse gas substance will have a significant adverse impact on navigation, fishing, pipeline construction or operation or the enjoyment of native title rights.

Circumstances in which a certificate may be refused

311. Subsection (4) provides that the responsible Commonwealth Minister may refuse to grant a certificate if he or she is not satisfied that the injected greenhouse gas substance is behaving as predicted in the site plan, or if he or she is satisfied that there is a significant risk to the conservation or exploitation of natural resources, or to the geotechnical integrity of a geological formation or structure or to the environment or human health or safety.

Proposed section 249CZFA Deferral of decision

312. The application for a site closing certificate is the start of the site-closing process. The grant of the site closing certificate is the end of that process. The site closing certificate cannot be given until the licensee has completed the work program that the responsible Commonwealth Minister has directed to be carried out. That work program may take months, perhaps many months. It is also possible that it might take years for the migration of the injected greenhouse gas substance to become predictable enough to enable the responsible Commonwealth Minister to reach the necessary state of confidence about the fate of the greenhouse gas in order to grant the site closing certificate. The injection licensee will have been required all along to keep the Minister informed about the behaviour of the injected greenhouse gas substance and of the licensee's predictions as to its future behaviour. It may therefore not take very much additional time and information for the post-injection stage to be completed. The possibility must be allowed for, however. Section 249CZFA therefore enables the responsible Commonwealth Minister to defer making a decision on the application for as long as is necessary.

Proposed section 249CZGAA Pre-certificate notice—security etc

313. Proposed section 249CZGAA applies where the responsible Commonwealth Minister has made the decision to grant a site closing certificate to an injection licensee. The pre-certificate notice requires the injection licensee to provide security to cover the cost of the program of monitoring of the future behaviour of the greenhouse gas substance stored in the identified greenhouse gas storage formation. The notice must set out the program of operations that the Commonwealth proposes to carry out. (The work program will have been initially proposed by the licensee in the application for a site closing certificate and will usually have been agreed with the licensee before the pre-certificate notice is given.) The notice must also set out an estimate of the future costs and expenses of the Commonwealth in carrying out the work, which will have been worked out in accordance with the regulations. It will also set out the form and amount of security to be lodged in respect of the

compliance by the holder of the site closing certificate with the future obligation in proposed section 249CZM to pay for the work.

314. The purpose of obtaining this security is that the program of monitoring and verification will be carried out over a considerable time, and there is no certainty that the person responsible for payment of the Commonwealth's costs and expenses will still be in existence, or still in a financial position to reimburse the Commonwealth.

Proposed section 249CZGA Issue of site closing certificate

315. If the injection licensee lodges the security in compliance with the pre-certificate notice, the responsible Commonwealth Minister must issue the site closing certificate.

Proposed section 249CZJB Transfer of securities

316. Proposed section 249CZJB provides for a transfer of the interest in a security provided under proposed section 249CZGA. This is necessary so that, if the whole or part of the security is discharged under regulations made under proposed section 249CZJC, the return can be made by the Commonwealth to the right person.

Proposed section 249CZM Recovery of the Commonwealth's costs and expenses

317. This section makes the costs and expenses of the Commonwealth in carrying out the post site closing work program recoverable from the holder of the site closing certificate. It is entirely possible that any attempt to recover under this section would be unsuccessful. The Commonwealth will, however, be able to call upon the security to the extent that the costs and expenses prove to be irrecoverable.

Part 2A.5 – Greenhouse gas search authorities

318. This Part deals with the granting of, and powers conferred by, greenhouse gas search authorities. A greenhouse gas search authority is the greenhouse gas title which corresponds to the petroleum special prospecting authority title (which are dealt with in Part 2.7 of the Act).

Division 1 – General provisions

Proposed section 249GA Simplified outline

319. This section provides a simplified outline of Part 2A.5. This is not an operative provision of the Act.

Proposed section 249GB Rights conferred by a greenhouse gas search authority

320. This section provides that a greenhouse gas search authority authorises the holder of the authority to, in the authority area, do everything required to explore for potential

greenhouse gas storage formations and injection sites, except for making a well. For example, the titleholder may carry out seismic surveys and seabed sampling.

321. The section provides that these titleholder rights are subject to the Act and the regulations (for example, a greenhouse gas search authority may be surrendered under Part 2A.10 of the Act, or cancelled under Part 2A.11, if the requirements in those Parts are met).

Proposed section 249GC Conditions of greenhouse gas search authorities

322. This section provides that the responsible Commonwealth Minister may grant a greenhouse gas search authority subject to whatever conditions the Minister thinks fit. Those conditions (if any) must be specified in the authority. Conditions could include, for example, temporal or spatial restrictions to avoid conflict with navigation in a shipping lane.

Proposed section 249GD Duration of greenhouse gas search authority

323. This section deals with the period during which a greenhouse gas search authority is in force. The section provides that an authority comes into force on the day specified in the authority, and remains in force for the period specified in the authority. This period must not exceed 180 days (see subsection (3)).
324. Subsection (4) provides that this section has effect subject to this Chapter. For example, a greenhouse gas search authority may be surrendered (under Part 2A.10). If that occurred, the authority would no longer be in force even if the period specified in the authority had not yet expired.

Proposed section 249GE Greenhouse gas search authority cannot be transferred

325. This section provides that a greenhouse gas search authority cannot be transferred from one person to another. The relatively short duration of a search authority (maximum 180 days) means that the administrative procedures which are involved in transferring a title under this Act (see Part 3A.3, discussed below) would be disproportionate to the duration of the authority. Further, as there is no enduring title to an area under a greenhouse gas search authority, it is not inconsistent with the nature of the title to require any new party to apply for a new search authority.

Division 2 – Obtaining a greenhouse gas search authority

Proposed section 249GF Application for greenhouse gas search authority

326. This section sets out the basic application procedure for greenhouse gas search authorities. This procedure is complemented by the standard procedures in Part 2A.8.
327. Subsection (1) specifies that a person or company may apply for a greenhouse gas search authority over a block or blocks, provided that none of the following are in

force over the block or blocks the subject of the application: a greenhouse gas assessment permit, a greenhouse gas holding lease, a greenhouse gas injection licence, an exploration permit, a retention lease or a production licence.

328. An application may be made in respect of blocks in relation to which another permit, licence consent or authority has been granted under the Act.
329. A company, which was not a titleholder under the Act, may apply for a greenhouse gas search authority if it wished to undertake speculative surveys in the offshore area, in order to sell the data obtained from those surveys.
330. As another example, a company which was a titleholder of a greenhouse gas assessment permit over a nearby area may apply for a search authority because the company wished to gather data outside of the permit area to better understand the regional geological or structural setting. (However, as an existing titleholder the person could achieve the same end by applying for a greenhouse gas special authority under Part 2A.6. This could be preferable as it could allow for obtaining access even when the block was under a type of title listed in subsection (1)).
331. The application must specify the operations which the applicant wishes to carry on, and the blocks within which the applicant wishes to carry on those operations. The application must be accompanied by the application fee - see section 249JB.

Proposed section 249GG Grant or refusal of greenhouse gas search authority

332. Where an application has been made for a greenhouse gas search authority, the responsible Commonwealth Minister must consider the application, and then either grant the authority to the applicant or refuse to grant the authority to the applicant. If the Minister refuses to grant the authority, the Minister must notify the applicant in writing of the refusal. If the Minister decides to grant the authority, the Minister may do so with or without conditions - see section 249GC.

Proposed section 249GH Holders to be informed of the grant of another greenhouse gas search authority

333. More than one greenhouse gas search authority may be granted in respect of a block (that is, search authority is not an exclusive right over the blocks in respect of which the authority is granted). This section provides for notification to be given to any existing holder of a search authority over a block if a new search authority is granted over the same block. The responsible Commonwealth Minister must provide written notification, setting out the operations authorised by the new greenhouse gas search authority, and any conditions of the authority.
334. The Minister is also required to notify the new search authority holder of the existing search authority or authorities in force in respect of that block, including the operations authorised by, and any conditions of, the authority or authorities.

Proposed section 249GJ Holders to be informed of the grant of a special prospecting authority

335. This section provides for notification to be given to any existing holder of a greenhouse gas search authority over a block if a special prospecting authority is granted over the same block (see Part 2.7 of the Act for provisions relating to special prospecting authorities). The Designated Authority must inform the search authority holder or holders of the operations authorised by, and any conditions of, the special prospecting authority. The responsible Commonwealth Minister must inform the person who has been granted the special prospecting authority of the existence of, the operations authorised by, and any conditions of, any greenhouse gas search authorities in force in respect of the block.

Part 2A.6 – Greenhouse gas special authorities

336. This Part deals with the grant of and powers conferred by greenhouse gas special authorities. Greenhouse gas special authorities are the greenhouse gas titles which correspond to petroleum access authority titles (see Part 2.8 of the Act).

Division 1 – General provisions

Proposed section 249HA Simplified outline

337. This section provides a simplified outline of Part 2A.6. This is not an operative provision.

Proposed section 249HB Rights conferred by greenhouse gas special authority

338. This provision authorises the holder of a greenhouse gas special authority to carry on, in the authority area, the operations specified in the authority. The holder must do so in accordance with any conditions to which the authority is subject (see section 249HC). The operations authorised by the special authority must relate to greenhouse gas exploration, injection or storage (see the table in section 249HE). The greenhouse gas special authority cannot not authorise the holder to make a well.
339. As provided in section 249HE, only a person who holds a greenhouse gas assessment permit, greenhouse gas holding lease, greenhouse gas injection licence or greenhouse gas search authority may apply for a greenhouse gas special authority. Further, the person can only be granted a special authority over an area which is either in the same offshore area as the existing title held by the person, or in an adjoining offshore area.
340. A person may apply for a greenhouse gas special authority if, for example, the person wished to obtain geoscientific information about a block adjacent to the person's title area. The operations for which authorisation is sought could, as an example, involve carrying out seismic surveys or seabed sampling.

341. The rights conferred on the holder of a greenhouse gas special authority are subject to the Act and the regulations (see subsection (3)). For example, other provisions of the Act provide for revocation and surrender of greenhouse gas special authorities, and work safety requirements.

Proposed section 249HD Duration of greenhouse gas special authority

342. This section provides for the period in which a greenhouse gas special authority will be in force. A special authority comes into force on the day specified in the authority, and remains in force for the period specified in the authority. The period may be extended by the responsible Commonwealth Minister for a further period.
343. Subsection (3) provides that this section has effect subject to this Chapter. For example, a greenhouse gas special authority may be surrendered (under section 249LD) or revoked (under section 249HL). If one of those events occurred, the authority would no longer be in force even if the period specified in the authority had not yet expired.

Division 2 – Obtaining a greenhouse gas special authority

Proposed section 249HE Application for greenhouse gas special authority

344. This section sets out who may apply for a greenhouse gas special authority. It also sets out what operations the person (or company) may apply to have authorised under a greenhouse gas special authority, and in respect of which areas the person may apply for a greenhouse gas special authority.
345. Additional procedures relating to obtaining a greenhouse gas special authority are set out in Part 2A.8 of the Act (see notes on that section below).

Proposed section 249HF Grant or refusal of greenhouse gas special authority

346. This section sets out limits on the responsible Commonwealth Minister's discretion to grant a greenhouse gas special authority to a person (or company) who has made an application under section 249HE. The Minister may only grant a greenhouse gas special authority to a person if the Minister is satisfied that it is necessary or desirable to do so, either for the more effective use of the applicant's rights, or for the proper performance of the applicant's duties, in the applicant's capacity as the registered titleholder of one of the titles set out in that section.
347. The Minister also has a power to refuse to grant a greenhouse gas special authority to the applicant, by notice in writing.
348. Consultation procedures apply to the consideration of certain applications for a greenhouse gas special authority - see the notes to section 249HG of the Act (below).

Proposed section 249HG Consultation – grant of greenhouse gas special authority

349. A consultation process must take place before a greenhouse gas special authority is granted if any of the area over which the greenhouse gas special authority is sought is already the subject of a greenhouse gas assessment permit, a greenhouse gas holding lease, a greenhouse gas injection licence or a greenhouse gas search authority held by a person who is not the applicant for the greenhouse gas special authority. The consultation process is set out in subsections (2)-(4).
350. There is an exception to the requirement for consultation if the titleholder has given written consent to the grant of the greenhouse gas special authority (see paragraph (1)(d)).
351. No consultation process is required if the greenhouse gas special authority applicant holds a separate title over the blocks over which the greenhouse gas special authority is granted. This may occur, for example, if the applicant's title over that block is about to expire or be terminated, but the applicant wishes to continue operations in the block for a period after the expiration or termination.

Division 3 – Variation of greenhouse gas special authority

Proposed section 249HJ Variation of greenhouse gas special authority

352. This section gives the responsible Commonwealth Minister power to vary a greenhouse gas special authority, by written notice given to the holder of the authority. Consultation is required in most cases before a variation is made - see section 249HJ.

Proposed section 249HJ Consultation – variation of a greenhouse gas special authority

353. This section sets out the consultation procedures which apply in relation to a proposed variation of a greenhouse gas special authority. Consultation must take place where the authority area is, to any extent, the subject of a greenhouse gas assessment permit, greenhouse gas holding lease, greenhouse gas injection licence or greenhouse gas search authority which is held by a person other than the person who holds the greenhouse gas special authority.
354. There is an exception to the requirement for consultation where the holder of the other title gives written consent to the variation - see paragraph (1)(d).

Division 2 – Reporting obligations of holders of greenhouse gas special authorities

Proposed section 249HK Reporting obligations of holders of greenhouse gas special authorities

355. This section provides for monthly reporting, by registered holders of greenhouse gas special authorities, of the operations carried out under the authority and the facts ascertained from those operations. The report must be given to any holder of a greenhouse gas assessment permit, greenhouse gas holding lease, or greenhouse gas injection licence which is in force in the same area as the greenhouse gas special authority. The reporting requirements are intended to benefit the holders of those other titles, by making data available which is relevant to those titles. The titleholders may be able to use that data for commercial purposes.
356. It is an offence not to comply with the reporting requirements (subsection (2)). The maximum penalty for the offence is specified as 50 penalty units, however a greater penalty could be imposed if a body corporate, rather than a natural person, was convicted of the offence (see section 4B(3) of the *Crimes Act*).

Division 5 – Revocation of greenhouse gas special authorities

Proposed section 249HL Revocation of greenhouse gas special authority

357. This section provides the responsible Commonwealth Minister with a power to revoke a greenhouse gas special authority. The section does not require that consultation take place prior to the Minister making the revocation. The generally short period of duration of a greenhouse gas special authority means that, in many cases, the greenhouse gas special authority would expire (according to its period of duration - see section 249HD) before a consultation process could have been completed.
358. The responsible Commonwealth Minister is required to notify any holder of a greenhouse gas assessment permit, greenhouse gas holding lease or greenhouse gas injection licence (which is in force in the same area as the greenhouse gas special authority) of the revocation. This is consistent with the requirement that the greenhouse gas special authority holder notify any such of the results of the greenhouse gas special authority operations under section 249HK.

Part 2A.7 – Greenhouse gas research consents

359. This Part recognises Australia's obligations under the United Nations Convention on the Law of the Sea (UNCLOS) to allow marine scientific research on its continental shelf (see in particular Article 246 of the UNCLOS).

Section 249HM Simplified outline

360. This section provides a simplified outline of Part 2A.7. It is not an operative provision.

Proposed section 249HN Rights conferred by greenhouse gas research consent

361. This section sets out the rights conferred on the holder of a greenhouse gas research consent.
362. A greenhouse gas research consent relates to one offshore area only. It authorises the holder to carry out, in the course of the scientific investigation specified in the consent, operations relating to the exploration for potential greenhouse gas storage formation and injection sites that are specified in the consent. A separate research consent would need to be sought if the applicant wished to carry on scientific investigations that required access to more than one offshore area.
363. These rights are subject to the conditions set out in the greenhouse gas research consent (see section 249HO below), and to section 249NF of the Act. Section 249NF of the Act operates, in general, so that the research consent holder must not interfere with the rights of other users of the marine areas in which the scientific investigation is carried out, to a greater extent than is necessary for the exercise of the research consent holder's rights.

Proposed section 249HO Conditions of greenhouse gas research consents

364. This section provides that the responsible Commonwealth Minister may grant a greenhouse gas research consent subject to whatever conditions the Minister thinks appropriate. The Minister must specify the conditions in the research consent.
365. Conditions in greenhouse gas research consents may be more wide-ranging in scope than conditions imposed in relation to other titles. This is because the conditions imposed in relation to a research consent are the primary legal instrument for regulating the research consent holder's activities.

Proposed section 249HP Grant of greenhouse gas research consent

366. This section provides the responsible Commonwealth Minister with a power to grant a greenhouse gas research consent to a person or company. The Minister may only grant a research consent which authorises a person (or company) to carry on, in an offshore area, operations which relate to the exploration for potential greenhouse gas storage formations or injection sites, in the course of a scientific investigation. This means that the Minister would require relevant information to be able to assess whether the activities in respect of which a research consent was sought fit within these requirements. This would be likely to include information about the credentials of the person or company seeking the research consent, and the objectives and plan of the scientific investigation in relation to which the research consent is sought.

Part 2A.8 Standard procedures

367. This Part sets out standard procedures which apply to the processes of applying for, considering and granting greenhouse gas titles under the Act.

Proposed section 249JA Application to be made in an approved manner

368. This section provides that the types of applications listed in the section must be made in the manner approved in writing by the responsible Commonwealth Minister. The Minister may approve a different manner of application for the different types of applications (s 33(3) of the *Acts Interpretation Act 1901*). For example, the responsible Commonwealth Minister may require that some information in some types of applications be provided in a statutory declaration, but not require a statutory declaration for other types of applications.

Proposed section 249JB Application fee

369. This section provides that applications of the kind listed in the section must be accompanied by the application fee (if any) specified in the regulations. A different application fee may be prescribed in the regulations for the different types of applications. The imposition of application fees enables the Commonwealth to recover the costs incurred in processing applications under the Act.
370. No application fee is required for an application for a greenhouse gas special authority or greenhouse gas research consent. Generally, an applicant for a greenhouse gas special authority will already be a titleholder (and therefore paying an annual fee in respect of that title), and the special authority work will be auxiliary to the work done under the title. Greenhouse gas research consents are provided in accordance with Australia's obligations under the UNCLOS, and may often be sought by non-profit organisations.

Proposed section 249JC Application may set out additional matters

371. This section provides that applicants submitting the types of applications set out in the section may, in the application, set out any additional matters that the applicant wishes the responsible Commonwealth Minister to consider when assessing the application.
372. This provision does not apply to every type of application. For example, applications covered by section 249JH are not covered by this section. This is because that section sets out consultation procedures (which enable the applicant to make additional submissions) which apply if a Minister proposes not to make the relevant grant.

Proposed section 249JD Responsible Commonwealth Minister may require further information

373. This section provides the responsible Commonwealth Minister with a power to require the applicant (in respect of the applications listed in subsection (1)) to give the Minister further specified information relating to the application. This power could be used more than once in connection with any particular application.
374. If the person who is required to provide additional information does not do so, the Minister may refuse to consider, or take any further action in relation to, the application.
375. The power to require further information does not relate to every type of greenhouse gas title application under the Act. For example, there is no power to seek additional information in relation to an application for a greenhouse gas search authority, special authority or research consent. If an application for one of these types of titles was rejected on the basis of the original application, the applicant could apply again, providing additional information in the new application.

Proposed section 249JE Offer documents

376. This section deals with the issuing of an offer document for the grant of a greenhouse gas assessment permit, greenhouse gas holding lease or greenhouse gas injection licence, and the renewal of a greenhouse gas holding lease. The section sets out what must be included in an offer document in respect of one of those titles. These requirements are intended to ensure that the applicant receives all the necessary information to be able to progress the grant or renewal of the title, and that the applicant is aware of the conditions which will operate in respect of the title. In practice, the applicant should be aware of these conditions prior to the issue of the offer document, through consultation about the conditions with the applicant during the application process. The section also provides that the offer document may require the applicant to lodge a security in respect of compliance with the applicant's relevant statutory obligations (see subsections (4) and (5)).
377. If the applicant cannot accept the conditions set out in the offer document, the applicant can allow the application to lapse by not making a request under section 249JF that the grant or renewal (as the case may be) be made.
378. There is no offer document issued in relation to greenhouse gas search authorities, special authorities or research consents. These titles are of short duration, and may simply be issued by the responsible Commonwealth Minister in accordance with the relevant legislative requirements for each title (see sections 249GG, 249FF and 249HP).

Proposed section 249JF Acceptance of offer – request by applicant

379. This section provides for the next step after an offer document is issued to an applicant under section 249JE.

380. An applicant who has received an offer document must accept the offer under this section in order for the title the subject of the application to be granted or renewed (as the case may be). Subsection (1) provides a table which sets out the time period within which the applicant must accept the offer. The time period for most types of applications is 30 days, however, the time period is longer for an application for a greenhouse gas injection licence. In respect of applications for a grant of a work bid greenhouse gas assessment permit, a grant of a greenhouse gas holding lease (but not a renewal) and a grant of a greenhouse gas injection licence, the responsible Commonwealth Minister may extend the period in accordance with the requirements set out in the table and subsections (2) and (3).
381. If the applicant does not accept the offer within the relevant timeframe, or pay a security if one is required, the application lapses (subsection (4) and section 249JGAA). In the case of an application for a cash-bid greenhouse gas assessment permit, the application will also lapse if the offer document specified an amount which must be paid to the Commonwealth for the grant of the permit, and the application does not pay the amount within the same timeframe under this section (see section 249JG).

Proposed section 249JG Acceptance of offer – payment

382. This section relates to applications for cash-bid greenhouse gas assessment permits. The section provides that an application will lapse if an offer document has been given to the applicant which specifies an amount that must be paid to the Commonwealth for the grant of the permit, and the applicant does not pay that amount within the timeframe that applies for accepting the offer (see the table in section 249JF(1)).

Proposed section 249JGAA Acceptance of offer – lodgment of security

383. This section applies where an offer document has been given to an applicant and that offer document requires a security to be lodged (see section 249JE(4)). The section provides that, if the security is not lodged within the time period for accepting the offer (see the table in section 249(JF(1))), then the application lapses.

Proposed section 249JH Consultation – adverse decisions

384. This section provides for consultation with an applicant where, in relation to an application of the type set out in subsection (1), the responsible Commonwealth Minister is considering refusing to make the relevant grant, renewal or variation. These applications relate to situations where the applicant is already a titleholder, and so would generally have made significant financial investment in the title in the preceding years.
385. The consultation process requires the Minister to advise the applicant of the Minister's reasons for the proposed refusal, and to take into account any submissions that the applicant makes to the Minister in relation to the proposed refusal. The

section also provides for consultation with other relevant persons. This could include, for example, contractors of the titleholder who carry out operations in the title area.

Part 2A.9 – Variation, suspension and exemption

Division 1 – Variation, suspension and exemption decisions relating to greenhouse gas assessment permits, greenhouse gas holding leases and greenhouse gas injection licences

Proposed section 249KA Variation, suspension and exemption – conditions of titles

386. In general, conditions placed on a title are expected to apply for the full period of the title. However, there are some circumstances where it may be appropriate for a condition to be varied or suspended, or an exemption granted from compliance with a condition. This section deals with when and how variation, suspension and exemption of conditions of greenhouse gas assessment permits, holding leases and injection licences may take place (see section 249KE for variation, suspension and exemptions for greenhouse gas special authorities and search authorities).
387. Subsection (1) sets out when the conditions of a title may be varied or suspended, or an exemption granted (see the table in that subsection). Subsection (2) provides the responsible Commonwealth Minister with the power of variation, suspension and exemption, by issue of a written notice to the titleholder. The Minister may impose conditions on the variation, suspension or exemption, and any conditions must be specified in the notice. However, the Minister's power under this section does not extend to altering the term of a title (see section 249KB, which includes a power to extend the term of a greenhouse gas assessment permit or greenhouse gas holding lease in certain circumstances).
388. If a greenhouse gas injection licence is varied under this section, the variation must be published in the *Gazette*, and the variation takes effect on that day. A variation of a greenhouse gas assessment permit or greenhouse gas holding lease takes effect on the day on which the notice of the variation is given to the titleholder.

Proposed section 249KB Extension of term of greenhouse gas assessment permit or greenhouse gas holding lease – suspension or exemption

389. As noted above in relation to proposed section 249KA, the responsible Commonwealth Minister cannot, under that section, extend the term of a permit, lease or licence to which that section applies. However, section 249KB provides the responsible Commonwealth Minister with a power to extend a greenhouse gas assessment permit or greenhouse gas holding lease in certain circumstances. Those circumstances are where a suspension or exemption has been made in relation to any condition of a greenhouse gas assessment permit or greenhouse gas holding lease (but not a greenhouse gas injection licence) under section 249KA, and the Minister considers that it is reasonable in the circumstances of the case to extend the term of

the permit or lease. The Minister cannot extend the term beyond the term of the suspension or exemption.

390. As an example, if a permittee is subject to a work program condition, but the permittee is temporarily unable to meet the work program milestones, the Minister may (depending on the circumstances) choose to exercise the Minister's discretion under section 249KA to grant an exemption from the work program condition for the period during which the permittee is unable to meet the work program milestones. Again depending on the circumstances, the Minister may also consider it reasonable to extend the period of the permit so that the permittee is not forced into non-compliance with the work program condition by not completing the work program by the end of the permit term.
391. The extension may be set out in the notice of suspension or exemption given to the titleholder under section 249KA, or in a later written notice given to the titleholder.

Proposed section 249KC Suspension of rights – greenhouse gas assessment permit or greenhouse gas holding lease

392. This section requires the responsible Commonwealth Minister to suspend rights conferred by a greenhouse gas assessment permit or greenhouse gas holding lease if the Minister is satisfied that it is necessary to do so in the national interest. This could occur, for example, as a result of a new discovery of an area of high environmental sensitivity, or for defence or national security reasons. The suspension may be of all or any of the rights conferred by the permit or lease, and may be indefinite or for a specified period. The term of the permit or lease may be extended accordingly (see section 249KD below).
393. This power does not extend to greenhouse gas injection licences, which generally involve a higher capital investment and a smaller seabed area than a greenhouse gas assessment permit or greenhouse gas holding lease.

Proposed section 249KD – Extension of term for greenhouse gas assessment permit or greenhouse gas holding lease – suspension of rights

394. If the responsible Commonwealth Minister has suspended any or all of the rights of a greenhouse gas assessment permit or greenhouse gas holding lease under section 249KC, the Minister has a related power to extend the term of that permit or lease for a period which is equal to (or less than) the period of the suspension. This power is expected to be exercised where, for example, the suspension means that the titleholder cannot keep to a work plan which is imposed as a condition of the title. If an extension was not granted in these circumstances, the titleholder may not be able to complete the work plan requirements before the end of the period of the title.

Division 2 – Variation, suspension and exemption decisions relating to greenhouse gas search authorities and greenhouse gas special authorities

Proposed section 249KE Variation, suspension and exemption – conditions of greenhouse gas search authorities and greenhouse gas special authorities

395. In general, conditions placed on a title are expected to apply for the full period of the title. However, there are some circumstances where it may be appropriate for a condition to be varied or suspended, or an exemption granted from compliance with a condition. This section deals with when and how variation, suspension and exemption of conditions of greenhouse gas search authorities and special authorities may take place (see section 249KA above in relation to variation, suspension and exemption of greenhouse gas assessment permits, holding leases and injection licences).
396. Subsection (1) sets out when the conditions of a title may be varied or suspended, or an exemption granted (see the table in that subsection). Subsection (2) provides the responsible Commonwealth Minister with the power of variation, suspension and exemption, by issue of a written notice to the titleholder.
397. The Minister may impose conditions on the variation, suspension or exemption. Any conditions must be specified in the notice.

Part 2A.10 – Surrender of titles

Division 1 – Surrender of greenhouse gas assessment permits, greenhouse gas holding leases and greenhouse gas injection licences

Proposed section 249LA Application for consent to surrender

398. This section sets out who may apply for a consent to surrender a greenhouse gas assessment permit, holding lease or injection licence, and whether the application must be in respect of the whole of the title or could also be made in respect of part of the title only.
399. An application may be made by the registered titleholder in writing. An application for consent to surrender a greenhouse gas assessment permit or a greenhouse gas holding lease must be for the whole permit or lease. However, an application to surrender made in respect of a greenhouse gas injection licence can be for either the whole licence, or some or all of the blocks in relation to which the licence is in force (for example, when the usefulness of some blocks covered by the licence has been exhausted, but other blocks covered by the title remain able to be used for injection, the titleholder may apply to surrender the blocks which are no longer able to be used for injection).

Proposed section 249LB Consent to surrender title

400. This section provides the responsible Commonwealth Minister with the power to give consent to a surrender application made under section 249LA, and sets out the criteria which must be met before consent can be given.
401. If some or all of the criteria are not met, the Minister may still consent to the surrender if the Minister is satisfied that there are sufficient grounds to warrant giving the consent. Alternatively, there may be a ground for cancelling the title instead. For example, one of the consent criteria is that that the titleholder has complied with the conditions of the title - see paragraph (3)(b). One of the grounds for cancellation is that the titleholder has not complied with the conditions of the title - see section 249MA(a). A titleholder would generally be expected to prefer a surrender to a cancellation (as a cancellation of a title may affect the titleholder's reputation).

Proposed section 249LC Surrender of title

402. If the responsible Commonwealth Minister gives consent to a surrender under section 249LB, then the titleholder may surrender the relevant title (or blocks under the title, as relevant) by written notice to the Minister. The surrender must be published in the *Gazette*, and takes effect on the day of publication.

Division 2 – Surrender of greenhouse gas search authorities and greenhouse gas special authorities

Proposed section 249LCA Surrender of greenhouse gas search authority

Proposed section 249LD Surrender of greenhouse gas special authority

403. The holder of a greenhouse gas search authority or greenhouse gas special authority may surrender the authority by written notice to the responsible Commonwealth Minister. There is no process of applying for and receiving consent to surrender for these titles (unlike for greenhouse gas assessment permits, holding leases and injection licences – see sections 249LA, 249LB and 249LC above).
404. If remedial action needs to be taken in respect of the title, this can be dealt with after surrender of the title under section 316-312.

Part 2A.11 – Cancellation of titles

Division 1 – Cancellation of greenhouse gas assessment permits, greenhouse gas holding leases and greenhouse gas injection licences

Proposed section 249MA Grounds for cancellation of title

405. This section sets out a list of grounds for cancelling a greenhouse gas assessment permit, greenhouse gas holding lease or greenhouse gas injection licence. The grounds generally relate to non-compliance with obligations (see paragraphs (a)-(d) –

for example, were the titleholder has not complied with a condition of the title or a direction, or been more than 90 days late in paying an amount due) or follow from a revocation of a declaration in relation to the title (see paragraphs (e) and (f)).

406. The power to cancel a title on one of these grounds is given by section 249MB, and must be exercised after a process of consultation (see section 249MC). Other sanctions may also be available (instead of or in addition to cancellation), depending on the particular breach or other action of the titleholder. For example, if the titleholder has breached a direction given under section 316-305, the titleholder could be liable for prosecution under section 316-307, and/or costs recovery under section 316-308.

Proposed section 249MB Cancellation of title

407. This section provides the responsible Commonwealth Minister with power to cancel a greenhouse gas assessment permit, greenhouse gas holding lease or greenhouse gas injection licence if there is a ground for doing so (see section 249MA for the grounds for cancellation). The Minister must follow the consultation procedures set out in section 249MC before exercising the power of cancellation. The Minister must also, in deciding whether to cancel the title, take into account any action the titleholder has taken to remove the ground of cancellation (for example, by paying the amount which was unpaid, or taking action to remedy a breach of condition) and to prevent the recurrence of similar grounds. After undertaking the consultation process and taking these matters into account, the Minister may decide not to cancel the title. If the Minister does decide to cancel the title, the cancellation must be published in the *Gazette*, and the cancellation takes effect on the day of publication.

Proposed section 249MC Consultation

408. This section sets out the consultation process which the responsible Commonwealth Minister is required to undertake prior to exercising the right to cancel a title under section 249MB. Broadly, the Minister is required to notify the titleholder, and any other person that the Minister sees fit (for example, a contractor who has been working on the title operations), of the proposed cancellation and the reasons for it, and invite each of those persons to make a submission about the proposal. When considering whether to go ahead with the cancellation, the Minister must take into account those submissions (as well as the other matters set out in section 249MB(2)).

Proposed section 249MD Cancellation of title not affected by other provisions

409. Titleholder breaches of this or other Acts can, in some cases, give rise to a number of possible consequences under the Act. This section deals with two of those cases, confirming that certain possible consequences are not mutually exclusive.
410. Subsection (1) and (2) provide that, where a titleholder has not complied with specified provisions of the Act (which could give rise to both cancellation of the title and criminal prosecution), the Minister may still exercise the power of cancellation if

the titleholder has been convicted of an offence in respect of that non-compliance. Likewise, the titleholder can still be prosecuted even if the Minister has exercised the power of cancellation as a result of the non-compliance.

411. Subsections (3) and (4) deal with the situation where the titleholder has not paid an amount due under this Act or the Annual Fees Act within 90 days of the payment being due. This could give rise to both cancellation of the title, and/or judgment from a Court in respect of that non-payment. The subsections provide that the Minister can still cancel the title even if Court judgment has been obtained, and that the titleholder is still liable to pay the unpaid amount (and any associated penalty) even if the Minister has already cancelled the title. This means that, after cancellation, the Commonwealth can pursue recovery of the amount through the Courts.
412. The inclusion of this section avoids uncertainty as to whether the responsible Commonwealth Minister must choose between cancellation or legal proceedings (either criminal or civil, depending on the circumstances), or can use both avenues.

Division 2 - Cancellation of greenhouse gas search authorities

Proposed section 249ME Cancellation of greenhouse gas search authority

413. This section provides the responsible Commonwealth Minister with a power to cancel a greenhouse gas search authority if the titleholder has breached a condition of the authority. The cancellation is by written notice to the titleholder.
414. There is no requirement to undertake consultation with the titleholder prior to cancelling the title (unlike in relation to the cancellation of greenhouse gas assessment permits, holding leases and injection licences). This difference reflects the shorter term of a search authority, which would generally mean that the search authority term would expire before a consultation process was complete.

Part 2A.12 Other provisions

Proposed section 249NCA Additional securities etc

415. Proposed section 249NCA applies to the holder of a greenhouse gas assessment permit, holding lease or injection licence. It provides that, in addition to the right of the responsible Commonwealth Minister to require that an applicant provide security for compliance with statutory obligations prior to the grant of the permit, lease or licence, the responsible Commonwealth Minister may, at any time during the term of the title, require the title-holder to provide security, or an additional security, in the form and in the amount specified by the responsible Commonwealth Minister. This will enable the responsible Commonwealth Minister, if events as they unfold suggest that insufficient security has been obtained from the title-holder, to require the title-holder to top-up the amount of security provided to a sufficient amount.

Proposed section 249NCB Transfer of securities

416. This provision ensures that, once a security is in force in relation to a greenhouse gas title, it will remain in force even though the title may have changed hands one or more times since the security was lodged. Usually, when a title-holder sells a title, any security lodged by that title-holder is discharged and it is necessary for the regulator to obtain a fresh security from the purchaser of the title. Proposed section 249NCB will have the effect that, when a greenhouse gas assessment permit, holding lease or injection licence is transferred, the interest of the transferor in the security is transferred to the transferee along with the title. Any reference to the transferor in the security documentation has effect as if it were a reference to the transferee. The transferee of the title therefore holds the reversionary interest in the security. The value of the security has effectively become part of the value of the title and will be paid for by the transferee as part of the purchase price.

Proposed section 249NCC Discharge of securities

417. The discharge of securities will be handled under the regulations.

Proposed section 249ND Approved site plans

418. Proposed section 249ND is a regulation-making power in relation to site plans. It provides, for example, that the regulations may provide that a greenhouse gas injection licensee must not carry on any operations in relation to an identified greenhouse gas storage formation unless an approved site plan is in force in relation to the formation (subsection (1)). The section also provides that the regulations may make provision for the responsible Commonwealth Minister to withdraw approval of approved site plans.
419. These are not matters for which a detailed and express regulation-making power would normally be necessary. There are already provisions in a number of sets of regulations under the principal Act that prohibit the carrying on of any activities under a petroleum title unless there is a particular kind of plan in force that has been approved by the Designated Authority. The *Offshore Petroleum (Management of Environment) Regulations 1999*, for example, contains such a provision.
420. The reason for including these express regulation-making powers in the Bill in relation to site plans is that the decision as to whether the site plan satisfies the requirements of the regulations (ie a *de facto* approval decision) is, under the provisions inserted by this Bill, an important pre-requisite for the grant of an injection licence. If there had been no express regulation-making powers of the kinds conferred by this section, there might have been a doubt as to whether that *de facto* approval, once given under the Act, could be subsequently withdrawn under the regulations.
421. A site plan must be kept under constant review and must be updated as operations progress and new information becomes available. A regulation prohibiting the carrying out of operations under the injection licence unless there is a site plan in

force is a necessary enforcement mechanism in the regulations, as it is in the case of the other plan-based regulations under the Offshore Petroleum Act. This is so that, if the title-holder fails to comply with obligations in the regulations in relation to updating the plan, or if operations differ materially from those described in the plan or other significant failures of risk management occur, the responsible Commonwealth Minister (or Designated Authority, in the case of the existing petroleum regulations) can withdraw approval of the plan and it ceases to be in force.

422. The express regulation-making power in proposed section 249ND is therefore included as a precautionary measure, in view of the particular status of the site plan in the injection licence-granting process under the Act.

Item 191 After Chapter 3

423. This item inserts a new Part 3A into the Act. New Part 3A covers a range of matters relating to the greenhouse gas title Register, including the requirement to keep a Register and registration of transfers of and dealings in greenhouse gas titles. Notes on the individual sections are set out below.

Chapter 3A – Registration of transfers of, and dealings in, greenhouse gas titles

Part 3A.1 – Introduction

Proposed section 298-250 Simplified outline

424. This section provides a simplified outline of Chapter 3A. This is not an operative provision of the Act.

Proposed section 298-251 Definitions

425. This section provides definitions of the terms *Register* and *title* for the purposes of Chapter 3A.

Proposed section 298-252 Dealing - series of debentures

426. This section provides that, for the purposes of Chapter 3A, if a dealing forms part of the issue of a series of debentures, then all of the dealings constituting the issue of that series of debentures are taken to be one dealing. The purpose of this clause is to enable greater administrative efficiency where there is an issue of a series of debentures.

Part 3A.2 – Register of titles and greenhouse gas search authorities

Proposed section 298-253 Register to be kept

427. This section requires the responsible Commonwealth Minister to keep a Register of greenhouse gas titles and greenhouse gas search authorities. The Register will, essentially, be a collection of memorials or entries relating to specified events, facts,

documents or instruments relating to greenhouse gas titles and search authorities. What must be included in the Register is set out in the provisions below.

Proposed section 298-254 Entries in Register - general

428. This section deals with the Register, and provides general rules for what must be included in the Register in respect of greenhouse gas titles and greenhouse gas search authorities. (Other sections in this and other Parts of Chapter 3A provide for additional registration requirements.)
429. Subsection (1) requires the responsible Commonwealth Minister to make an entry (called a 'memorial') in the Register in respect of each greenhouse gas title and greenhouse gas search authority. What must be entered in the memorial for each title is set out in the table in subsection (2). The Minister must also make a memorial of any notice or other instrument which varies, cancels, surrenders (in whole or part) or has any other effect on a greenhouse gas title or greenhouse gas search authority (see subsection (3)). The subsections (1)-(3) requirements will be taken to be sufficiently complied with if, instead of making a separate memorial, the Minister enters in the Register a copy of the relevant greenhouse gas title, greenhouse gas search authority, notice or instrument.
430. The Minister must endorse, on every memorial or document copy entered in the Register, the date on which it was entered in the Register (subsection (5)).

Proposed section 298-255 Entry in Register - cessation or expiry of title

431. This section provides that if any of the events specified in this section occur in relation to a greenhouse gas title or a greenhouse gas search authority, the Minister must enter a memorial of that fact in the Register. Those events relate to particular circumstances (as set out in the section) where a title or search authority expires or otherwise ceases to be in force.

Part 3A.3 – Transfer of titles

Proposed section 298-256 Approval and registration of transfers

432. This section provides that a transfer of a greenhouse gas title has no force until it has been approved by the responsible Commonwealth Minister *and* an instrument of transfer has been registered under Part 3A.3.
433. The following sections in this Part deal with applications and approvals of transfer, and registration of instruments of transfer.

Proposed section 298-257 Application for approval of transfer

434. This section provides that either party to a proposed transfer of a greenhouse gas title may apply to the responsible Commonwealth Minister for approval of the transfer. The application must be in writing.

435. See proposed section 298-258 for details of what documents must accompany an application, and proposed section 298-259 for the time limit for making an application.

Proposed section 298-258 Documents to accompany application

436. This sections sets out what documents must accompany an application for a transfer, and certain content and execution requirements for those documents.

Proposed section 258-259 Time limit for application

437. This section provides that, in general, an application for transfer must be made within 90 days after the last party executes the transfer document. This time limit is intended to keep the Register as current as possible, which assists in providing certainty for investors and potential investors. However, where there are sufficient grounds to warrant allowing a longer time period for making an application, the responsible Commonwealth Minister may do so.

Proposed section 298-260 Dates of application to be entered in the Register

438. The responsible Commonwealth Minister must enter the date of an application for transfer in the Register. This requirement is aimed at ensuring there is no uncertainty about the date of application (see section 298-259 above). The Minister may also make other notations if the Minister considers it appropriate to do so.

Proposed section 298-260 Approval of transfer

439. If an application is made for approval of a transfer, the responsible Commonwealth Minister must consider the application and then either approve or refuse to approve the transfer. The Minister must notify the applicants of the decision and, if the decision was to refuse to approve the transfer, make a note of this refusal in the Register.

Proposed section 298-262 Registration of transfer

440. If the responsible Commonwealth Minister approves the transfer of a greenhouse gas title, the Minister must make a note of the approval on the instrument of transfer and a copy of that document. Once the transfer fee has been paid (see the Registration Fees Act), the Minister must enter certain details of the transfer in the Register.
441. The transfer takes effect once the specified details of the transfer have been entered in the Register. After this, the responsible Commonwealth Minister must retain and make available for inspection the copy of the instrument of transfer which was endorsed with the Minister's approval. The original endorsed instrument must be returned to the applicant.

Proposed section 298-263 Instrument of title does not create an interest in the title

442. Merely executing a transfer does not create an interest in the title for the person whom the title is proposed to be transferred. See section 298-262 above, which provides that registration is required in order for a transfer to take effect.

Proposed section 298-264 Limit on effect of approval of transfers

443. The approval of a transfer does not give the transfer any force, effect or validity that the transfer would not have had if Chapter 3A had not been enacted. For example, the approval of a transfer could not remedy a legal defect in the contract between the transferor and the transferee.

Part 3A.4 – Devolution of title

Proposed section 298-265 Application to have name entered on the Register as the holder of a title

Proposed section 298-266 Entry of name in the Register

444. In some cases, the rights of the registered holder of a greenhouse gas title may devolve on another person by operation of law. Where this has occurred, these sections provide a process for the person on whom the title rights have devolved to become the registered holder of the title.
445. Section 298-265 provides that the person may apply in writing to the responsible Commonwealth Minister to have that person's name entered in the register as the holder of the title. Section 298-266 provides that, if a person has made an application and paid the prescribed fee (which will be set out in the regulations), then, if the responsible Commonwealth Minister is satisfied that the rights of the holder have devolved on the applicant by operation of law, the Minister must enter that person's name in the Register as the holder of the title.
446. The applicant becomes the registered holder of the title when the Register entry is made.

Part 3A.5 – Change in name of company

Proposed section 298-267 Application to have new name entered on the Register

Proposed section 298-268 Alteration in Register

447. These sections provide the process for having the name of a company altered in the Register, where that company (which is the registered holder of a greenhouse gas title) changes its name.
448. Section 298-267 provides that the company may apply to the responsible Commonwealth Minister in writing to have its new name substituted for its previous name in the Register in relation to a title for which it is the registered holder. Section

298-268 provides that, if an application has been made and the prescribed fee (which will be set out in the regulations) paid, then, if the Minister is satisfied that the company has changed its name as set out in the application, then the Minister must alter the Register accordingly.

449. Separate applications need to be made for each title for which the company is the registered holder.

Part 3A.6 - Dealings relating to existing titles

Proposed section 298-269 Dealings to which this Part applies

450. This clause sets out the various types of dealings and agreements to which Part 3A.6 applies. These do not include transfers of titles, which are dealt with in Part 3A.3. Creation and assignment of rights and interests in relation to greenhouse gas titles are covered, as well as other specified dealings in relation to titles and other greenhouse gas permits, licences and leases.

Proposed section 298-270 Approval and registration of dealings

451. This section provides that a dealing covered by this Part is of no force, unless it has been approved by the responsible Commonwealth Minister and has been entered in the Register under section 298-276. This allows the Minister to consider any proposed dealing before it takes effect (see section 298-275).

Proposed section 298-271 Application for approval of dealing

452. This section provides that an application for an approval of a dealing must be made in writing. A separate application must be made for each title in respect of which approval of the dealing is sought.
453. Any party to the dealing may make the application. The concurrence of the other party or parties to the dealing will be evidenced in the documents required to accompany an application (see section 298-272).

Proposed section 298-272 Documents to accompany application

454. This provision sets out the documents which must accompany an application for approval of a dealing. As well as providing the instrument evidencing the dealing (or a copy if that instrument has been lodged with a separate application), the applicant may choose to provide a supplementary instrument. This option is provided so that, if the dealing is approved, a member of the public may access and view the supplementary instrument rather than the original instrument (which may contain information which the applicant wishes to keep confidential). The prescribed details to be included in the supplementary instrument will be set out in regulations.
455. Subsection (5) provides that, where a company creates a charge, and lodges documents with ASIC under section 263 of the *Corporations Act 2001* in relation to

the creation of that charge, the applicant for approval of a dealing may provide a copy of the documents lodged with ASIC instead of the instrument evidencing the dealing.

456. Subsection (4) requires certain document copies to accompany the application.

Proposed section 298-273 Timing of application

457. This section provides that, in general, an application for approval of a dealing must be made within 90 days after the last party executes the instrument evidencing the dealing. This time limit is intended to keep the Register as current as possible, which assists in providing certainty for investors and potential investors. However, where there are sufficient grounds to warrant allowing a longer time period for making an application, the responsible Commonwealth Minister may do so.

458. This section is subject to section 298-284 (see below), which deals with approval of a dealing where the dealing was entered into before the relevant greenhouse gas title came into existence.

Proposed section 298-274 Application date to be entered in the Register

459. The responsible Commonwealth Minister must enter the date of an application for approval of a dealing in the Register. This requirement is aimed at ensuring there is no uncertainty about the date of application (see section 298-273 above). The Minister may also make other notations in the Register if the Minister considers it appropriate to do so.

Proposed section 298-275 Approval of dealing

460. If an application is made for approval of a dealing in respect of a particular title, the responsible Commonwealth Minister must consider the application and then either approve or refuse to approve the dealing. The Minister must notify the applicant of the decision and, if the decision was to refuse to approve the dealing, make a note of this refusal in the Register.
461. The Minister's powers under this section are limited by section 298-284, which deals with approval of a dealing that was entered into before the title came into existence.

Proposed section 298-276 Entry of dealing in Register

462. If the responsible Commonwealth Minister approves a dealing in respect of a particular title, the Minister must make a note of the approval on the instrument evidencing the dealing and the copy of that document (or, if a copy of the instrument was lodged in place of the original, on both of the copies). Once the relevant fee has been paid (see the Registration Fees Act), the Minister must enter certain details of the approval in the Register. The Register entry must consist of an entry on the memorial relating to the relevant title, or the copy of the title.

Proposed section 298-277 Retention, inspection and return of instruments

463. This section provides for certain documents relating to approved dealings to be retained by the responsible Commonwealth Minister and made available for inspection by the public.
464. If no supplementary instrument was lodged with the application, the original instrument evidencing the dealing (or the copy, if no original was lodged), endorsed with the Minister's approval of the dealing, must be made available for inspection in accordance with Chapter 3A. If a supplementary instrument was lodged with the application, that supplementary instrument must be made available for inspection in accordance with Chapter 3A of the Act (endorsed with the Minister's approval), and the instrument evidencing the dealing must not be made available for inspection.
465. For provisions relating to inspection of documents under Chapter 3A, see section 298-296. For information about the content and purpose of supplementary instruments, see the notes to proposed section 298-272.
466. The section also requires the Minister to return the original instrument evidencing the dealing, and the supplementary instrument if one was lodged, to the applicant. The returned instrument/s evidencing the dealing must be endorsed with the approval of the responsible Commonwealth Minister (see also subsection 298-276(2)), to provide the applicant with certification of the approval of the dealing.

Proposed section 298-278 Strict compliance with application provisions not required

467. This section has the effect that any failure of the responsible Commonwealth Minister to comply with the any of the requirements of this Part relating to approval of a dealing will not render the approval or registration of a dealing ineffective.

Proposed section 298-279 Limit on effect of approval of dealing

468. This section provides that the approval of a dealing does not give a dealing any force, validity or effect that it would not have had if Chapter 3A had not been enacted. This means that the approval of a dealing under this Chapter will not overcome a legal failing in the dealing arrangements between the parties to the dealing.

Part 3A.7 – Dealings in future interests

469. This Part deals with the situation where persons wish to enter into a dealing in relation to a title before that title has come into existence. For example, a party that holds a greenhouse gas assessment permit, and has applied for (but not yet been granted) a greenhouse gas injection licence, may conclude a dealing with another party relating to equity in the future greenhouse gas injection licence, in anticipation of the licence being granted.

Proposed section 298-280 Provisional application for approval of dealing

470. This section provides that where two parties enter into a dealing relating to a title that may come into existence in the future (such as in the example above), a party to the dealing may make a provisional application for approval of that dealing. In order for this section to apply, the dealing must be one to which, if the title came into existence, Part 3A.6 would apply. As for applications for approval under Part 3A.6, a separate application must be made in for each title in respect of which approval of the dealing is sought (see section 298-271).
471. See section 298-281 for the documents which must accompany the application.

Proposed section 298-281 Documents to accompany provisional application

472. This clause requires and permits (as relevant) the same documents to accompany a provisional application for approval of a dealing as would be provided for under clause 298-272 if the dealing were in relation to a title which already existed.

Proposed section 298-282 Timing of provisional application

473. This section provides for when a provisional application may be made. A provisional application for approval of a dealing relating to a greenhouse gas assessment permit, a greenhouse gas holding lease, or a greenhouse gas injection licence may be made on or after the day on which an offer document relating to the application for the title is given to the applicant for the title. A provisional application for approval of a dealing relating to a greenhouse gas special authority may be made on or after the day that an application for the grant of the special authority is made. The difference exists because there is no offer document given for a greenhouse gas special authority.
474. A provisional application cannot be made after the relevant title comes into existence (after that time, an application for approval of a dealing would be made under Part 3A.6).
475. The section does not make any stipulations relating to the timing of the dealing (which the subject of the application). The commercial transaction could be made prior to the relevant title application was lodged, or after it was lodged (but before the title was granted).

Proposed section 298-283 Provisional application to be treated as application under section 298-271 when title comes into existence

476. This section provides that, if a provisional application has been made in respect of a title which may come into existence, and that title comes into existence, then the provisional application will be treated as though it was an application for approval of a dealing (made under section 298-271 of Part 3A.6) which was made on the date that the title came into existence. This is provided that the dealing is one to which Part 3A.6 applies - see section 298-269 for dealings to which that Part applies.

Proposed section 298-284 Limit on approval of dealing

477. This section provides a limit on approvals of dealings in respect of a title which took place before the title came into existence, by providing that these types of dealings may only be approved if one of two courses is taken. Either a provisional application must have been lodged under Part 3A.7 in respect of that dealing (in which case the application will be treated as an application under Part 3A.6 when the title comes into existence), or an application for approval of the dealing must be lodged under Part 3A.6 within 90 days of the title coming into existence (or, if there are sufficient grounds to warrant allowing a longer period and the responsible Commonwealth Minister allows a longer period, within that period).

Part 3A.8 – Correction and rectification of Register

Proposed section 298-285 Corrections of clerical errors or obvious defects

478. To protect the interests of investors and potential investors, making changes to entries in the Register must not be a process which is taken lightly. This section is the only section which allows the responsible Commonwealth Minister to alter the Register without first publishing the Minister's intention to do so, or as a result of the matter being heard by a Court. This power is restricted to the correction of clerical errors and obvious defects.

Proposed section 298-286 General power of correction of Register

479. This section provides the responsible Commonwealth Minister with a general power to make entries to correct the Register, to ensure the accurate record of the interests and rights which exist in relation to a title. The Minister may do so on Minister's own initiative, or in response to a written application by another person. To protect the interests of persons who have an interest in the accuracy of the Register, before the Minister makes any entry the Register under this section, the Minister is required to publish the proposed entry and allow for those persons to make a submission about the entry. If submissions are made, the Minister must take them into account when deciding whether or not to make the proposed entry. If no submissions are made in relation to the proposed entry, the Minister may decide to make the entry in any case. If the Minister makes an entry under this section, the final form of the entry must be published in the *Gazette*.

Proposed section 298-287 Rectification of Register

480. This section provides a list of grievances that a person may have in relation to the Register (for example, that an entry is incorrect) and provides an avenue for aggrieved persons to apply to the Federal Court or the relevant Supreme Court. The Court may then make any orders it sees fit in relation to the rectification of the Register, and the responsible Commonwealth Minister must comply with those orders.

Part 3A.9 – Information-gathering powers

Proposed section 298-288 Responsible Commonwealth Minister may obtain information from applicants

481. This clause refers to all types of applications that companies or individuals can make under this Chapter in relation to the Register, and provides the responsible Commonwealth Minister with a power to require the applicant to provide such additional information as the Minister considers necessary or advisable. The Minister exercises this power by providing a written notice to the applicant.
482. This provision is intended to ensure that the Minister is able to provide proper vetting of the credentials of applicants seeking to register an interest in the title.
483. The section contains two offence provisions. The first, in subsection (4), provides that it is an offence if a person who has been given a notice to provide additional information omits to do an act, and that omission contravenes a requirement in the notice. The second, in subsection (5), provides that it is an offence for a person, who has been given a notice, to give information which the person knows is false and misleading in a material particular. The maximum penalty for both of these offences is 50 penalty units. The section also includes a note that the same conduct may be an offence against both subsection (5) of this section and section 137.1 of the *Criminal Code*. It is an offence under section 137.1 to give information (in purported compliance with a law of the Commonwealth) which is false or misleading, or knowing that it omits any matter or thing without which the information is misleading. The maximum penalty for that offence is 12 months imprisonment.

Proposed section 298-289 Responsible Commonwealth Minister may obtain information from a party to an approved dealing

484. This section provides the responsible Commonwealth Minister with a power to require a party to a dealing in relation to a title (which has been approved under section 298-275) to give the Minister information about alterations in the interests or rights existing in relation to the title. As for section 298-288 above, the Minister exercises this power by providing a written notice to the applicant, and can require such information as the Minister considers necessary or advisable.
485. This provision will, amongst other things, enable the Minister to obtain information relevant to keeping the Register information up to date in respect of rights and interests in titles.
486. Equivalent offence provisions to those set out in section 298-288 are included in this section (see subsections (4) and (5)). Again, the same conduct may be an offence under subsection (5) and section 137.1 of the *Criminal Code*.

Proposed section 298-290 Production and inspection of documents

487. This section provides the responsible Commonwealth Minister with a power to require a person, by written notice, to produce or make available a document which is related to an application under this Part. This enables the Minister to obtain and consider documents which would be relevant to an application.
488. The section includes offence provisions which are similar to those in sections 298-288 and 298-289.

Proposed section 298-291 Responsible Commonwealth Minister may retain documents

489. This section provides the responsible Commonwealth Minister with a power to take possession of a document produced under section 298-290 and to retain it for as long as is necessary. The section contains protections for the person who would otherwise be entitled to the possession of the document and who may need or wish to access or use the document while it is in the possession of the Minister. That person is entitled to be supplied with a certified copy of the document, and until a certified copy is supplied, the Minister or inspector must provide that person (or another person authorised by the person) with reasonable access to the document for purposes of inspecting the document, and making copies of or taking extracts from it.

Part 3A.10 – Other provisions

Proposed section 298-292 Responsible Commonwealth Minister not concerned with the effect of instrument lodged under this Chapter

490. This section is intended, along with sections 298-264 and 298-279 (discussed above), to clarify that any instrument lodged with the responsible Commonwealth Minister under this Chapter takes effect according to its own terms. That is, the Minister is not responsible for verifying that the instrument has the effect in law that it purports to have. Of course, it may be necessary for the Minister to make some inquiry into the legal effect of an instrument in order to identify its effect in relation to the Act. However, otherwise, the legal effect of an instrument is a matter for the Courts and not for the Minister.

Proposed section 298-293 True consideration to be shown

491. The amount of registration fee payable on a transfer or dealing will be calculated according to the value of the consideration involved in the transfer or dealing. This offence provision is directed to ensuring that the correct value of the consideration (and any other information relevant to the calculation of the fee) is reported in instruments lodged with the responsible Commonwealth Minister which relate to a transfer or dealing. The maximum penalty for this offence is 100 penalty units. The same conduct may be an offence under this section, and under section 137.2 of the *Criminal Code*, which relates to knowingly producing a false or misleading document.

Proposed section 298-294 Making a false entry in the Register

492. This offence provision is directed to ensuring the accuracy of the contents of the Register. The section provides that a person commits an offence if the person makes an entry, causes an entry to be made or concurs in the making of an entry in the Register, and does so knowing that the entry is false. The offence applies equally to an official working with the Register, a member of the public (for example, who inspects the Register) or an applicant who provides false information to the responsible Commonwealth Minister for entry in the Register. The maximum penalty for the offence is 50 penalty units. The same conduct may be an offence under this section and section 145.4 of the *Criminal Code*, which relates to (amongst other things) falsifying a Commonwealth-held document with the intention of obtaining a gain or causing a loss. That offence has a maximum penalty of 7 years.

Proposed section 298-295 Falsified documents

493. This section provides that a person commits an offence if the person produces or tenders in evidence a document which falsely purports to be a copy of or extract from either a Register entry or an instrument given to the responsible Commonwealth Minister under this Chapter. The offence is directed to ensuring that persons do not use, in evidence, forged or counterfeit Register documents. The maximum penalty for this offence is 50 penalty units. However, the same conduct may be an offence under this section and under section 137.2 of the *Criminal Code*. Section 137.2 relates to the producing of false or misleading documents. The maximum penalty for that offence is imprisonment for 12 months.

Proposed section 298-296 Inspection of Register and instrument

494. This section provides for public access to the Register, and to instruments which are subject to inspection under Chapter 3A. The section requires the responsible Commonwealth Minister to ensure that the Register and instruments are available, at all convenient times, on payment of the relevant fee (calculated under the regulations).

Proposed section 298-297 Evidentiary provisions

495. This section confers status on the Register (and certified copies of and extracts from it) as prima facie evidence in all courts and tribunals of the matters required or authorised to be contained, and which are contained, in the Register (or copy or extract, as the case may be). The clause also allows for evidentiary certificates to be prepared. This option may be used to confirm facts which may not be obvious from a single entry in the Register or a single document held by the responsible Commonwealth Minister. These certificates have status as prima facie evidence of the statements contained within them. The person who signed the certificate may be called to give evidence in criminal proceedings, and any evidence given in support or rebuttal of a matter stated in a certificate must be considered on its merits.

496. The section provides for a fee to be prescribed under the regulations for the obtaining of a copy of or extract from the Register, or an evidentiary certificate. This fee is serve to recover the costs incurred in making the copy, extract or certificate.

Proposed section 298-298 Assessment of fee

497. This section provides the responsible Commonwealth Minister with a power to determine the amount of a fee payable under the Registration Fees Act in relation to an entry in the Register. Such a determination must, of course, comply with the provision of that Act. Other fees, for example the fee applicable to obtaining an evidentiary certificate under section 298-297(4), will not be determined by the Minister, as they will be set out in regulations made under this Act.
498. Subsection (2) deals with the situation where the Minister has made a fee determination on the basis of an instrument given by a person, which contains statements in relation to the consideration for the transfer or dealing (or any other fact which affects the amount of fee payable for the transfer or dealing), but that person is convicted of an offence in relation to providing that instrument under section 298-293. The subsection provides the responsible Commonwealth Minister with a power to make a fresh determination of the amount of the fee payable under the Registration Fees Act (so as to make the applicant liable for the correct amount of the fee, not the incorrect amount calculated on the basis of the false or misleading information contained in the instrument originally given to the Minister).

Item 200 Part 4.2A—Directions relating to greenhouse gas

Division 2—General power to give directions

Proposed section 316-305 General power to give directions

499. Proposed section 316-304 confers on the responsible Commonwealth Minister a very broad power to give directions to greenhouse gas title-holders and others engaged in offshore greenhouse gas operations. The section corresponds to existing section 305, except that the titles and operations are greenhouse gas, not petroleum, titles and operations and the person on whom the power is conferred is the responsible Commonwealth Minister instead of the Designated Authority.. The same is true of the ancillary provisions in proposed sections 316-306 and 316-307, which correspond to sections 306 and 307.

Division 3—Responsible Commonwealth Minister may take action if there is a breach of a direction

Proposed section 316-308 Responsible Commonwealth Minister may take action if there is a breach of a direction

500. Proposed section 316-308 provides that, if a direction given under the greenhouse gas provisions of Act is not complied with, the responsible Commonwealth Minister may carry out whatever work the person subject to the direction failed to carry out

and recover the costs from that person. The section corresponds to existing section 308, except that the titles and operations are greenhouse gas, not petroleum, titles and operations, the provisions of the Act referred to are greenhouse gas provisions and the person on whom the power is conferred is the responsible Commonwealth Minister instead of the Designated Authority.

Division 4

Proposed section 316-309 Defence of taking reasonable steps to comply with a direction

501. Proposed section 316-309 provides for a defence to a prosecution for a breach of a direction that the defendant took all reasonable steps to comply with the direction. This section corresponds to existing section 309.

Item 204 After subsection 311(2)

502. Item 204 inserts a new subsection into section 311. Section 311 confers power on the Designated Authority to give a petroleum title-holder (including an infrastructure licensee and a pipeline licensee) to do such things as remove property from the title area, plug wells, make good damage to the seabed etc. This is the principal provision under which the decommissioning of petroleum projects is supervised by the Designated Authority.
503. Item 204 is concerned with the plugging of petroleum wells made in the petroleum title area by the petroleum title-holder. Unplugged petroleum wells and (probably more so) inadequately plugged petroleum wells that are in the migration path of injected greenhouse gas substance have the potential to allow the greenhouse gas substance to migrate to the surface and so into the sea or the atmosphere. They may also allow the greenhouse gas substance to migrate into other geological formations and contaminate other natural resources. A plugging of a well in a manner that will prevent the escape of petroleum through the well may not, after a time, prevent the escape of a greenhouse gas substance. It has therefore become necessary that, in the case of petroleum title areas that are located in a potential migration path of injected greenhouse gas substance, petroleum wells are plugged to a standard that makes them able to withstand the effects of carbon dioxide.
504. Petroleum title areas that are so located that they may affect greenhouse gas operations are able to be 'declared' by the responsible Commonwealth Minister under proposed section 79B (exploration permits), section 114 (retention leases) and section 138B (production licences).
505. Item 204 inserts into section 311 a subsection (2A) which provides that the Designated Authority, in deciding whether wells have been plugged or closed off to the satisfaction of the Designated Authority, must (in the case of a declared petroleum title) and may (in the case of other petroleum titles) have regard to the principle that plugging or closing off wells should be carried out in a way that

restores or maintains the suitability of a geological formation for the permanent storage of greenhouse gas substances. There will be a consequent cost to the petroleum industry, where the Designated Authority imposes the new standard for plugging wells. It has, however, become a necessary cost for petroleum title-holders of sharing certain parts of the Australian continental shelf with greenhouse gas title-holders.

Item 205 After subsection 312(3)

506. Item 205 inserts a new subsection (3A) into existing section 312. Section 312 confers on the Designated Authority a power to give the same kinds of directions to former holders of petroleum titles as section 311 does in relation to current holders of petroleum titles. New subsection (3A) is in the same terms as the subsection inserted by item 204 into section 311.

Item 207: Division 2—Greenhouse gas

Proposed section 316-311 Remedial directions to current holders of permits, leases and licences

507. Proposed section 316-311 confers on the responsible Commonwealth Minister power to give directions to holders of greenhouse gas titles to do such things as remove property from the title area, plug wells, make good damage to the seabed and provide for the conservation and protection of the natural resources in the title area. In relation to greenhouse gas injection licensees, this direction-giving power applies only when no greenhouse gas substance has been injected under the authority of the licence (except for injection on an appraisal basis as part of exploration for another greenhouse gas storage formation in the licence area).
508. The section corresponds to existing section 311, except that the titles and operations are greenhouse gas titles and operations, not petroleum titles and operations, and the person on whom the power is conferred is the responsible Commonwealth Minister instead of the Designated Authority.
509. The same is true of proposed section 316-312, which corresponds to existing petroleum section 312. Proposed section 316-312 gives the responsible Commonwealth Minister the same direction-giving powers in respect of former holders of greenhouse gas titles as proposed section 316-311 does in relation to existing holders of greenhouse gas titles.

Proposed section 316-311A Site closing directions to current holders of greenhouse gas injection licences

510. Proposed section 316-311A confers on the responsible Commonwealth Minister a power to give a range of remedial and precautionary directions to an injection licensee during the site closing period that go beyond the kinds of directions that the Minister can give to other greenhouse gas title-holders or that the Designated Authority can give to petroleum title-holders. They are similar to the directions that

the responsible Commonwealth Minister can give for the purpose of dealing with 'serious situations', although there is not, under proposed section 316-311A, any requirement to establish that a 'serious situation' exists. The site closing process begins when all injection and storage operations in a greenhouse gas injection licence area have ceased. At that time, the licensee is required to apply for a site closing certificate.

511. Section 316-311A applies where operations for the injection and storage of a greenhouse gas substance have been carried on in an injection licence area and all such operations in the licence area have ceased. (In a licence area where there are multiple identified greenhouse gas storage formations, operations must have ceased in all of them for the operation of this section to be triggered. A staged shut-down of operations at multiple storage formations in the one licence area will be managed via the site plan until operations at the last storage formation have ceased.) There is a further requirement that the injection licensee have applied for a site closing certificate, or that the licensee have been under an obligation to apply for a site closing certificate and have failed to do so.
512. The difference between the directions that the responsible Commonwealth Minister can give under this section and those the Minister can give under section 316-311 and section 316-312 is that, as well as having the ordinary powers to direct decommissioning work in the licence area, the responsible Commonwealth Minister can direct the licensee to carry out work for the purpose of ensuring that the injected greenhouse gas substance does not, in the future, cause damage to the environment or other resources or cause injury or loss to other users of the sea or risk to the health and safety of the offshore workforce.
513. The work that a licensee is directed to carry out will include an extensive program of monitoring of the behaviour of the injected greenhouse gas substance during the site closing period. Examples of other kinds of work that can be directed under section 316-311A, if circumstances warrant it, are: to plug old, abandoned petroleum wells, or to carry out remediation work at other potential weak spots, either in the identified greenhouse gas storage formation (ie in the licence area) or in a geological formation or structure that is in the projected migration path of the stored greenhouse gas substance perhaps many years into the future. The actual activity required might take the form of concreting, or recovering some of the greenhouse gas substance to relieve pressure at a particular site or perhaps injecting greenhouse gas substance or air or water to increase pressure at a site.
514. The direction-giving powers are conferred by subsection (2). Paragraph (a) is the ordinary power to direct removal or other disposal of property brought into the licence area by the licensee. Paragraph (b) is the ordinary power to direct the plugging of wells in the licence area, with the important difference that the wells need not have been drilled under the authority of the injection licence – they may be petroleum exploration wells that were allowed to remain unplugged when a former petroleum title-holder abandoned the site. Paragraph (c) is the ordinary power to

require provision for the conservation and protection of the natural resources in the licence area. Paragraph (d) is the ordinary power to require the making good of any damage to the seabed or subsoil in the licence area caused by any person engaged in operations under the licence. Paragraph (e) confers an express power (which would have been implied in any case) to require the licensee to carry out operations to monitor the behaviour of the greenhouse gas substance in the storage formation.

515. Paragraph (f) is the new direction-giving power to require work in relation to the storage formation. It extends to requiring any action for the purpose of dealing with the risk that the injected greenhouse gas substance will have a significant adverse impact on other users of the sea or seabed, the conservation or exploitation of natural resources, the geotechnical integrity of a geological formation or structure, the environment or human health or safety. Paragraph (g) confers power to require work for the purpose of ensuring or increasing the likelihood that the stored greenhouse gas substance will behave as predicted in the site plan.
516. Subsection (6) makes clear that directions under paragraphs (f) and (g) can require the doing of something inside or outside the licence area.

Proposed section 316-311B Consultation—direction to do something outside the licence area

517. Proposed section 316-311B sets up a consultation process where the responsible Commonwealth Minister proposes to give a direction to an injection licensee to do something outside the licence area in an area over which another person holds a greenhouse gas title. This will ensure that the responsible Commonwealth Minister is fully informed of any risk that the directed action might pose for the other title-holder's workforce, infrastructure and operations. It will also ensure that the other title-holder can make the responsible Commonwealth Minister aware of any matters that the title-holder wishes to have taken into account by the Minister when framing the direction.

Proposed section 316-312 Remedial directions to former holders of permits, leases, licences and authorities

518. Proposed section 316-312 provides the responsible Commonwealth Minister with the same direction-giving powers as proposed section 316-311, except that under this section the direction is given to a former holder of the title.

Proposed section 316-313 Responsible Commonwealth Minister may take action if there is a breach of a direction

Proposed section 316-313 provides that, if a direction given under proposed section 316-311A or 316-312 is not complied with, the responsible Commonwealth Minister may carry out whatever work the person subject to the direction failed to carry out and recover the costs from that person. The section corresponds to existing section 313.

Proposed sections 316-314 and 316-315

519. Proposed section 316-314 makes provision for the responsible Commonwealth Minister to remove, sell or otherwise dispose of property where a person has failed to comply with a direction under proposed section 316-313. Proposed section 316-315 excludes any action, suit or proceeding, by a person other than the Minister acting under subsection 316-314(4), in relation to the removal, disposal or sale, or purported removal, disposal or sale, of property under section 316-314. There is an exception in the case of an action under proposed section 442D. Section 442D is the 'constitutional safety net' provision. It provides a right to compensation in circumstances where the operation of the Act or the regulations would result in an acquisition of property otherwise than on 'just terms' and the relevant provision or provisions would for that reason be invalid by operation of section 51(xxxi) of the Constitution.

Item 208 Before section 317

520. This amendment inserts a new heading before section 317: 'Division 1 – Petroleum', which will establish a new Division 1 in Part 4.4 of the Act.
521. Part 4.4 is titled 'Offences and enforcement'. Division 1, constituting sections 317–322 of the Act (which are already in the Act, and are subject to only minor amendments, set out below) will deal with offences and enforcement relating to petroleum titles and operations.
522. A new Division 2 will be inserted by item 216 (see below), which will deal with offences and enforcement relating to greenhouse gas titles and operations. That item will also establish a new Division 3, containing the current section 323 (with minor amendments). That Division will deal with the time for bringing proceedings for offences, in relation to both petroleum and greenhouse gas titles.

Item 209 Section 317

Item 210 Section 317

Item 211 Section 317

523. These items provide for consequential amendments to section 317 (which currently contains a simplified outline of Part 4.4, but after the amendments will contain a simplified outline of Division 1 of Part 4.4) to reflect the changes in the structure of Part 4.4 which are effected by Items 208 and 216. As described above in relation to item 208, Part 4.4 will go from being a Part without Divisions, which deals with offences and enforcement relating to petroleum titles, to being a Part with three Divisions. The first Division will deal with offences and enforcement relating to petroleum titles. The second Division will deal with offences and enforcement relating to greenhouse gas titles. The third Division, which will contain the current section 323, will deal with the time for bringing proceedings for offences under both of Divisions 1 and 2.

Item 212 Subsections 318(1), (2), (2A), (3) and (5)

Item 213 Subsections 319(1), (2), (3), (4), (5), (7) and (9)

Item 214 Subsections 320(1), (2) and (4)

Item 215 Subsection 321(2) (definition of *structure*)

524. These items provide for consequential amendments to sections which are in Part 4.4 of the Act and which will, by operation of Item 208 (discussed above) become part of Division 1 of that Part. The amendments insert the word 'petroleum' before the words 'project', 'pipeline', 'pumping station', 'tank station' and 'valve station' in various provisions in new Division 1, to make these terms consistent with the other terms which refer to petroleum operations in the Act, and to restrict the operation of those provisions to petroleum operations. Greenhouse gas operations will be dealt with in new Division 2 of Part 4.4 (see the notes to items 208 and 216).

Item 216 Before section 323

525. This item inserts new Division 2 into Part 4.4 of the Act, titled 'Greenhouse gas'. This Division will deal with offences and enforcement relating to greenhouse gas titles (offences and enforcement relating to petroleum titles are dealt with in Division 1 of Part 4.4. See the notes to item 208 above). Notes on individual sections are set out below.

Division 2 – Greenhouse gas

Proposed section 316-317 Simplified outline

526. This section provides a simplified outline of Division 2 of Part 4.4. It is not an operative provision of the Act.

Proposed section 316-318 Appointment of greenhouse gas project inspectors

527. This section provides the responsible Commonwealth Minister with a power to appoint greenhouse gas project inspectors, and requires the Minister to issue each inspector with an identity card. The categories of persons from which appointments may be made are set out in subsection (1).
528. An inspector may perform functions such as observing engineering operations on offshore facilities, but the most usual duties of an inspector would generally relate to examining documentation held by the operators of those facilities. Section 316-319 sets out the monitoring powers of inspectors. Other powers in relation to information and documents are set out in section 406-409.
529. Inspectors must carry their identity cards whenever they are exercising the powers or functions of an inspector (subsection (4)). Subsection (3) is an offence provision, which requires a person who ceases to be an inspector to return his or her identity card to the responsible Commonwealth Minister (unless it has been lost or

destroyed). The maximum penalty for this offence is 5 penalty units. The ex-inspector would bear the evidential burden in relation to proving that the card was lost or stolen.

Proposed section 316-319 Monitoring powers of greenhouse gas project inspectors

530. This section sets out the monitoring powers that a greenhouse gas project inspector may exercise for the purposes of the Act and regulations. These powers are consistent with the monitoring powers conferred on mining inspectors, and include wide-ranging access, inspection and testing rights in offshore areas, including powers to inspect and take copies of documents relating to greenhouse gas operations (subsection (2)). The occupier or person in charge of the premises accessed by the inspector is required to provide the inspector with all reasonable facilities and assistance for the exercise of the inspector's powers (see subsection (7)). It is an offence not to comply with this requirement, punishable by a maximum of 50 penalty units (subsection (8)).
531. A limited power to access residential premises onshore (and to inspect and take copies of documents from those premises) is also provided (subsections (3)-(6)). That power may only be exercised with the consent of the occupier of the premises, or under a warrant (see section 316-320 for when a warrant may be issued).
532. Inspectors also have powers in relation to obtaining information and documents under section 406-409. However, the exercise of those powers requires written notice to be given to the person requested to provide the information or documents, and providing at least 14 days for compliance with the request (see the notes on section 406-409 below).
533. It is an offence to obstruct or hinder an inspector in the exercise of his or her powers, without a reasonable excuse (subsection (9)). The defendant bears an evidential burden in relation to proving the reasonable excuse). The maximum penalty for this offence is 50 penalty units. The same conduct may be an offence under this section and also under section 149.1 of the *Criminal Code*, which deals with the obstruction of Commonwealth public officials. The maximum penalty for that offence is imprisonment for two years.

Proposed section 316-320 Warrants to enter residential premises

534. This section provides for the issue of a warrant to enter residential premises for the purposes of exercising the powers under section 316-319(3) (see the notes on that section above). The section requires certain information to be provided in support of an application for a warrant, and provides for certain conditions to be specified in the warrant (such as when the warrant may be executed, and when the warrant ceases to have effect). These provisions are consistent with other provisions providing for official entry into residential premises in other Commonwealth legislation.

Proposed section 316-321 Interfering with greenhouse gas installations and operations

535. This section is an offence provision. It provides for a maximum penalty of 10 years imprisonment for engaging in conduct which results in damage or interference with greenhouse gas structures, vessels, equipment and operations (as described in subsection (1)). The severity of the penalty reflects the potentially serious consequences of damage to, or interference with, facilities or operations. This section is complemented by sections 329 and 331, which prohibit vessels from navigating too close to offshore facilities through the use of safety zones.

Proposed section 316-322 Forfeiture orders etc.

536. This section relates to convictions for various offences including and relating to unauthorised exploration for potential greenhouse gas storage formations or injection sites (section 249AC), and unauthorised injection and storage of greenhouse gas (section 249CC). The related offences are: being an accessory after the fact (see section 6 of the *Crimes Act*) and the ancillary offences (attempt, incitement or conspiracy) referred to in section 11.6 of the *Criminal Code*.
537. The section provides that, if a person is convicted of one of these offences, the Court may make an order for the forfeiture of a specified aircraft or vessel, or equipment, used in the commission of the offence. The Court may take evidence in relation to these matters before making orders.

Division 3 – Time for bringing proceedings for offences

538. This heading establishes a new Division 3 in Part 4.4, containing section 323 (Time for bringing proceedings for offences), with minor amendments as set out in items 217, 218 and 219. See the notes to item 216 in relation to the new structure of Part 4.4.

Item 217 After subparagraph 323(1)(a)(i)

Item 218 After subparagraph 323(1)(a)(ii)

Item 219 After subparagraph 323(1)(a)(iv)

539. These items amend section 323, which deals with the timeframe in which proceedings for offences under the Act may be brought. The items provide for section 323 to cover the new offences inserted into the Act by item 169 (insertion of new Part 2A), item 191 (insertion of new Part 3A) and item 274 (insertion of new Part 5A) respectively.

Item 220 Section 324

540. This item amends the simplified outline of Part 4.5 to reflect the amendments made to that Part by items 221-252. Broadly, those items rename and make minor amendments to Division 2 of that Part to clarify that that Division applies in relation

to petroleum titles and operations, and insert a new Division 3, which applies in relation to greenhouse gas titles and operations. Notes on those items are set out below.

541. The simplified outline is not an operative provision of the Act.

Item 221 Section 326 (paragraph (a) of the definition of *exempt vessel*)

Item 222 Section 326 (paragraph (b) of the definition of *exempt vessel*)

Item 223 Section 326 (at the end of the definition of *exempt vessel*)

Item 224 Section 326

Item 225 Section 326

Item 226 Section 326

Item 227 Section 326

Item 228 Section 326 (at the end of the definition of *relevant vessel*)

Item 229 Section 326 (definition of *safety zone*)

542. These items amend the definitions in section 326 of the Act (Division 1 of Part 4.5) to insert definitions relating to greenhouse gas titles and operations (which are dealt with under new Division 2A of Part 4.5, see item 328 below), to expand certain existing definitions to include references to greenhouse gas titles and operations, and to restrict certain other existing definitions so that they cover only petroleum titles and operations.

Item 230 At the end of paragraph 328(1)(e)

Item 231 After subsection 328(2)

Item 232 Subsection 328(3)

543. These sections provide for the responsible Commonwealth Minister to declare that a person is an authorised person for the purposes of Part 4.5. This reflects the Minister's role in relation to the administration of the aspects of the Act which deal with greenhouse gas titles and operations.

Item 233 Division 2 of Part 4.5 (heading)

544. This item amends the heading to Division 2 of Part 4.5. The heading currently reads 'Safety zones'. The new heading will be 'Petroleum safety zones'. Greenhouse gas safety zones will be dealt with in new Division 2A (inserted by item 238).

Items 234–237 Subsections 329(1), (2), (3), (5), (7) and (9)

545. These items amend certain subsections of section 329, so that the terms used in that section are consistent with the new definitions relating to petroleum titles and operations in Division 1 of Part 4.5 of the Act (see notes to items 221–229 above).

Item 238 After Division 2 of Part 4.5

546. This item inserts a new Division 2A into Part 4.5. The new Division 2A is titled 'Greenhouse gas safety zones'. Petroleum safety zones are dealt with in Division 2 of this Part. Notes on individual sections are set out below.

Division 2A – Greenhouse gas safety zones

Proposed section 335-329 Greenhouse gas safety zones

547. This section authorises the responsible Commonwealth Minister to prohibit, by *Gazette* notice, vessels from entering or being present in a greenhouse gas safety zone (as set out in the notice) without the Minister's consent. The safety zone may extend to 500m around a greenhouse gas well, a greenhouse gas structure or greenhouse gas equipment which is specified in the notice. The section provides for a range of offences relating to breaching the safety zone prohibition (subsections (3), (5), (7) and (9)). The different offences are based on different fault elements, with a maximum penalty of imprisonment for 15 years for the offence that has a fault element of intention. The offence with a fault element of recklessness has a maximum penalty of 12.5 years, the offence with a fault element of negligence has a maximum penalty of 10 years, and the strict liability offence has a maximum penalty of 5 years.
548. This provision is designed to ensure the safety of offshore greenhouse gas installations and equipment. The significant penalties in the provision recognise the potentially serious consequences of damage to, or interference with, greenhouse gas facilities or operations. They are intended to act as a deterrent to persons whose dangerous navigation or other conduct could place at risk the lives of scores of people on board offshore structures.

Item 239 Paragraph 333(1)(a)

Item 240 Subparagraph (333)(1)(b)(ii)

Item 241 Paragraph 333(1)(d)

Item 242 Paragraph 334(1)(a)

Item 243 Subparagraph (335(a)(i)

549. These items amend section 333 (Other powers of authorised persons) and 334 (Warrants) to include references to new section 335-329, inserted by item 238 (see the notes on that section above). These amendments will mean that authorised

persons will be able to exercise their powers in situations where there has been, is or may be a contravention of that section, and warrants will be able to be sought in respect of past, present or future contraventions of that section.

Item 244 At the end of subsection 336(1)

550. This item amends section 336, which is in Part 4.6 (Collection of fees and royalties), Division 1 (Fees payable under the Annual Fees Act) of the Act. The amendment extends the scope of the section to cover situations where a fee is payable under the Annual Fees Act in relation to a year of the term of a work-bid greenhouse gas assessment permit, a greenhouse gas holding lease, or a greenhouse gas injection licence.

Item 245 Paragraph 339(a)

Item 246 At the end of paragraph 339(b)

551. These items amend section 339 to provide a specific reference to the provision of the Annual Fees Act (that is, section 4) under which an amount may be due and payable in relation to a year of the term of a petroleum title.

Item 247 At the end of Division 1 of Part 4.6

552. This item adds a new section, equivalent to section 339, which covers amounts payable to the Commonwealth under section 4A of the Annual Fees Act (that is, amounts in relation to a year of the term of a greenhouse gas title set out in section 336(1)).

Item 248 Section 340

553. This item inserts a specific reference to the provisions of the Registration Fees Act (that is, sections 5 and 6) under which a registration fee may be payable in respect of a petroleum title.

Item 249 At the end of Division 2 of Part 4.6

554. This item inserts a new section to provide that the fees payable under the Registration Fees Act in relation to a greenhouse gas title (that is, under sections 6A and 6B of that Act) are payable to the Commonwealth.

Item 250 Section 346

Item 251 At the end of section 346

555. Section 346 provides that the fees listed in that section are payable under the Act are to be paid to the Designated Authority on behalf of the Commonwealth. The fees currently listed all relate to petroleum titles.

556. Item 250 amends the section so that the current section content (that is, the requirement to pay petroleum title fees to the Designated Authority) becomes subsection (1). Item 251 inserts new subsection (2), which provides that the fees payable under the Act set out in that subsection (which relate to greenhouse gas titles) are payable to the Commonwealth.

Part 4.7—Occupational Health and Safety

557. One of the major advantages of adopting the legislative approach of incorporating greenhouse gas titles and injection and storage activities into the Offshore Petroleum Act is that the occupational health and safety of the offshore workforce engaged in the construction, operation, maintenance and decommissioning of structures, vessels, pipelines and equipment used in injection and storage operations and related operations can readily be brought under the regulatory supervision of the National Offshore Petroleum Safety Authority.
558. The facilities and processes used in the recovery, preliminary processing and transporting of petroleum are very much the same as those that will be used in the transporting, offshore processing and injection of greenhouse gas substances. Indeed, injecting substances into geological formations and structures is already an important element in some offshore petroleum projects. This means that the occupational health and safety risks to the workforce engaged in offshore greenhouse gas operations will be well-known to NOPSA and its OHS inspectors and that NOPSA is uniquely well-placed to take on this new function.

Item 252 Section 348 Listed OHS laws

559. Item 252 adds proposed section 316-321, which prohibits interfering with a greenhouse gas installation or operation, to the 'listed OHS laws' that are administered by NOPSA, to the extent that such interference has OHS implications for the workforce.

Item 254 Section 353 Definitions

560. Item 254 adds to the NOPSA-related definitions in section 353 a definition of 'Greenhouse Gas Storage Ministerial Council'. This is defined to mean a Ministerial Council that deals with injection and storage of greenhouse gas substances or, if there is no such body, the Ministerial Council on Mineral and Petroleum Resources (MCMPR).

Item 256 Section 353 Definitions

561. Item 256 inserts a definition of 'offshore greenhouse gas storage operations'. This term corresponds to the term 'offshore petroleum operations', which is a main delineator of the scope of NOPSA's regulatory responsibilities. Where appropriate, references to 'offshore petroleum operations' in the Act, including Schedule 3, will now have 'or offshore greenhouse gas storage operations' added to them. 'Offshore greenhouse gas storage operations' is defined as any 'regulated' operations (including

diving operations) that relate to greenhouse gas exploration, injection, storage, compression, processing, offloading, piped conveyance or pre-injection storage of greenhouse gas and monitoring of stored greenhouse gas in the seabed or subsoil.

NOPSA's regulatory responsibilities in relation to greenhouse gas activities are confined to 'offshore greenhouse gas storage operations' that, if they are diving operations, take place in Commonwealth waters or, if they are not diving operations, take place in Commonwealth waters and at a 'facility'. The term 'facility' is therefore the other main delineator of the scope of NOPSA's regulatory responsibilities.

Item 265 Chapter 5 (heading)

562. This item replaces the current Chapter 5 heading ('Chapter 5 – Information') with the new heading 'Chapter 5 – Information relating to petroleum'. This does not signify a change in the scope of Chapter 5. Chapter 5 already deals with information containing petroleum, and this will not change after passage of the Amending Act. However, the Amending Act will also insert new Chapter 5A (see item 274, discussed below), which deals with information relating to greenhouse gas. This heading change is intended to assist the reader in this context.

Items 266 – 273

563. These items amend sections 406, 409, 411, 413, 414, 415 and 416 in Chapter 5 of the Act. The sections are amended by inserting the word 'petroleum' before references to 'projects' in those sections. These amendments confine the information which is covered by those sections to information relating to petroleum projects, so the provisions will not cover information relating to greenhouse gas projects. Information relating to greenhouse gas projects will be covered by provisions in new Chapter 5A (see item 274).

Item 274 After Chapter 5

564. This item inserts a new Chapter 5A into the Act, headed 'Information relating to greenhouse gas'. New Chapter 5A will contain provisions relating to data management and gathering of greenhouse gas information, and release of regulatory and technical regulation relating to greenhouse gas projects.
565. Notes on each of the proposed provisions in new Chapter 5A are set out below.

Chapter 5A – Information relating to greenhouse gas

Part 5A – Data management and gathering of information

Division 1 – Introduction

Proposed section 406-406 Simplified Outline

566. This item inserts a short simplified outline of new Part 5A.1 of the Act. This is not an operative provision of the Act.

Division 2 – Data management

Proposed section 406-407 Direction to keep records

567. This section confers on the responsible Commonwealth Minister a power to give directions to greenhouse gas title holders about documenting a greenhouse gas operation, including by keeping accounts, records and other documents, and collecting and retaining cores, cuttings and samples. The Minister may also require the person to give those documents and other items to the Minister.
568. A person commits an offence if the person is subject to a direction, the person omits to do an act, and the omission breaches the direction. The maximum penalty for the offence is 100 penalty units.
569. A requirement under this section is additional to any requirements in regulations made under proposed section 406-408 (discussed below).

Proposed section 406-408 Regulations about data management

570. This section provides for regulations under the Act to make provision for data collection and management relating to greenhouse gas operations, including the giving of data and samples to the responsible Commonwealth Minister or another person. The regulations may establish a scheme for requiring greenhouse gas title holders to submit a *data management plan* in accordance with the regulations, and to act in accordance with an approved data management plan.
571. Much of the information and material collected through the operation of these regulations will eventually become publicly available and potentially useful to other persons and companies wishing to undertake greenhouse gas or petroleum operations in the area.
572. If a titleholder is subject to any requirement or requirements under section 406-407 (see above), that requirement or those requirements are additional to any requirement or requirements in regulations made under this section (see subsection 406-408(5)).

Division 3 – Information-gathering powers

Proposed section 406-409 Responsible Commonwealth Minister or greenhouse gas project inspector may obtain information and documents

573. Whereas the previous two sections deal with powers to require titleholders to collect and manage data relating to greenhouse gas operations, this section provides the responsible Commonwealth Minister or a greenhouse gas project inspector with a power to require any person (which may be an individual or a corporation, and not necessarily a titleholder) to provide factual information which is relevant to the proper administration of the Act by way of documents or oral or written evidence.
574. In order to exercise this power, the Minister or inspector must provide the person with a written notice setting out the details of the information to be provided, and the manner and time of, or timeframe for, its provision. The notice must set out the effect of the following offence provisions which relate to the giving of evidence or information: subsection 406-409(5) (the offence provision for this section); section 406-415 (giving false and misleading information); section 406-416 (producing false or misleading documents); and section 406-417 (giving false or misleading evidence).
575. A person commits an offence if the person has been given a notice, and the person omits to do an act, and the omission contravenes a requirement in the notice. The maximum penalty for this offence is 100 penalty units.
576. See proposed section 406-412 (discussed below) in relation to situations where the giving of information or evidence, or producing a document, may tend to incriminate the person required to comply with the requirement.

Proposed section 406-410 Copying documents - reasonable compensation

577. A person who is given a notice which requires him or her to copy and produce documents (see proposed section 406-409(2)(c), discussed above) is entitled to reasonable compensation for complying with that requirement. This is a safeguard provision to ensure that a requirement to make copies of documents under that section does not effect an acquisition of property otherwise than on just terms, contrary to the requirements of s 51(xxxi) of the Constitution.

Proposed section 406-411 Power to examine on oath or affirmation

578. If a person is required to appear to give evidence to the responsible Commonwealth Minister or a greenhouse gas project inspector under proposed section 406-409 (see above), this section provides that the Minister or inspector (as the case may be) has power to administer an oath or affirmation to that person, and examine that person on oath or affirmation. This could be appropriate, for example, in the course of an investigation, to determine whether charges could be laid against a person who is not the person giving evidence.

Proposed section 406-412 Self-incrimination

579. This section relates to section 406-409. The section provides that a person who is required to give information or evidence, or to produce a document under that section, will not be excused from that requirement on the grounds that the information, evidence or document might tend to incriminate the person or expose the person to a penalty.
580. The section also provides that the relevant information is not admissible in evidence against the person in civil proceedings, or criminal proceedings except in relation to offences against subsection 406-409(5) of the Act (omission breaching a notice requirement); section 406-415 of the Act (giving false and misleading information); section 406-416 of the Act (producing false or misleading documents); section 406-417 of the Act (giving false or misleading evidence), or section 137.1 or 137.2 of the Criminal Code, where the proceedings relate to this Division of this Act.
581. This partial immunity from legal consequences for the person increases the likelihood of a successful investigation. In some circumstances, it may be more important to establish the facts in relation to an incident than to use the facts in a prosecution or other legal action.

Proposed section 406-413 Copies of documents

582. This section is relevant to sections 406-409. The section provides that the responsible Commonwealth Minister or a greenhouse gas inspector may inspect a document produced under this Division, and may make and retain copies of, or take and retain extracts from, such a document.

Proposed section 406-414 Responsible Commonwealth Minister or greenhouse gas project inspector may retain documents

583. This section is also relevant to section 406-409. The section provides the responsible Commonwealth Minister or a greenhouse gas project inspector (as relevant) with a power to take possession of a document produced to that person under this Division, and to retain it for as long as is reasonably necessary. The section contains the same protections for the person who would otherwise be entitled to the possession of the document as under section 298-291 (discussed above). In particular, the person who would otherwise be entitled to possession of the document is entitled to be supplied with a certified copy of the document, and until a certified copy is supplied, the Minister or inspector must provide that person (or another person authorised by the person) with reasonable access to the document for purposes of inspecting the document, and making copies of or taking extracts from it.

Proposed section 406-415 False or misleading information

584. This section, along with the following two provisions, is an offence provision. The offence relates to the power of the responsible Commonwealth Minister or a greenhouse gas project inspector to require a person to give information under

subsection 406-409(2). The section provides that a person commits an offence if the person is required to give information under that subsection, and the person gives information, and the person does so knowing that the information is false or misleading in a material particular. The maximum penalty for this offence is 100 penalty units.

585. The same conduct may constitute an offence against both this section, and section 137.1 of the *Criminal Code*.

Proposed section 406-416 False or misleading document

586. This is another offence provision, which relates to providing documents in response to a notice from the responsible Commonwealth Minister or a greenhouse gas project inspector under subsection 406-409(2). The section provides that a person commits an offence if the person has been given notice under that subsection, the person produces a document to the Minister or inspector, in compliance or purported compliance with the notice, and the person does so knowing that the document is false or misleading in a material particular. The maximum penalty for this offence is 100 penalty units.

587. The same conduct may constitute an offence against both this section, and section 137.2 of the *Criminal Code*. However, the penalty for breaching section 137.2 may be up to 12 months imprisonment.

Proposed section 406-417 False or misleading evidence

588. This offence provision relates to notices given by the responsible Commonwealth Minister or a greenhouse gas project inspector under subsection 406-409 which require a person to give evidence. The section provides that a person commits an offence if the person gives evidence to another person, the person does so knowing that the evidence is false or misleading in a material particular, and the evidence is given under section 406-409. The maximum penalty for this offence is imprisonment for 12 months, consistent with the *Criminal Code* penalties for knowingly providing false or misleading information or documents.

Part 5A.2 – Release of regulatory information

Proposed section 406-418 Notifiable events – Gazette notice

589. This section provides that the responsible Commonwealth Minister must publish the occurrence of certain events in the *Gazette* (along with such details of the event as the Minister thinks fit). The events are set out in the table in the section, and generally relate to the grant, renewal, variation, and expiry (including through cancellation, surrender and termination) of various greenhouse gas titles.
590. As provided for in section 442 of the Act, if the event takes place in the offshore area of a State or Territory, the event may be published in the Government Gazette of that State or Territory, and will then be taken to have been published in the

(Commonwealth) *Gazette*. Publication in the Commonwealth *Gazette* would generally take place where the event takes place in the offshore area of an external territory.

Part 5A.3 – Release of technical information

591. This Part deals in particular with information and samples which fall within the definitions of *documentary information* and *eligible samples* respectively. See sections 406-421 and 406-421A for definitions of those terms, and related information.

Division 1 – Introduction

Proposed section 406-420 Simplified outline

592. This section provides a short simplified outline of Part 5A.3. This section is not an operative provision of the Act.

Proposed section 406-421 Definitions

Proposed section 406-421A Documents and samples given to the responsible Commonwealth Minister

593. Proposed section 406-421 provides definitions of the following terms used in Part 5A.3: *applicable document* (which is related to the definition of *documentary information*); *documentary information*, and *eligible sample*.
594. Proposed section 406-421A relates to identifying which documents and samples fall within the scope of the definitions of *applicable document* and *eligible sample*. That section specifies certain documents and samples which are to be disregarded in considering whether a document is an *applicable document* or a sample is an *eligible sample*.

Division 2 – Protection of confidentiality of documents and samples

Subdivision A - Information and samples obtained by the responsible Commonwealth Minister

Proposed section 406-422 Protection of confidentiality of documentary information obtained by the responsible Commonwealth Minister

Proposed section 406-423 Protection of confidentiality of eligible samples obtained by the responsible Commonwealth Minister

Proposed section 406-424 Responsible Commonwealth Minister may make information or samples available to a Minister, a State Minister or a Northern Territory Minister

595. These sections restrict what the responsible Commonwealth Minister may do with documentary information and eligible samples. They do this by providing that the Minister must not make documentary information publicly known or available to any person, or make details of an eligible sample publicly known, or permit a person to inspect an eligible sample, unless doing so falls within one of the exceptions listed in these provisions.
596. The exceptions are as follows. The Minister may make information and samples available to Commonwealth, State and Northern Territory Ministers. The Minister may make information and samples available to other persons (or publicly) if this is done in accordance with the regulations, or for the purposes of the administration of the Act or the regulations.
597. These exception relating to Ministers provides for information to be provided, without breaching the confidentiality requirement, to the Commonwealth Minister who administers environmental legislation, or to other State and Territory Ministers to ensure proper coordination of the various government agencies which are concerned with Australia's marine jurisdiction.
598. The exception which provides for data to be made public in accordance with the regulations anticipates a scheme in the regulations for making much of the technical information and material collected publicly available. Such information would be potentially useful to other exploration companies with a future interest in the areas over which the submitter of the information held a title. If such a company began operations in the area under a new title, it would be required to contribute to the database of technical information in turn. However, there would generally be a period of delay between the receipt of the information and it being available to members of the public under the regulations.

Subdivision B – Miscellaneous

Proposed section 406-427 Fees

599. This section provides that the regulations may provide for fees relating to making information and samples available to a member of the public (see paragraphs 406-422(2)(c) and 406-423(2)(c)). This provision enables the Commonwealth to recover expenses incurred in giving this access (for example, the costs of staff time in searching for the document or sample, photocopying and mailing).

Proposed section 406-429 Privacy Act

600. The *Privacy Act 1988* (Privacy Act) deals with the management of personal information (broadly, information about an individual), and provides various restrictions on its disclosure (and other activities relating to personal information). This section provides that Part 5A does not override any requirements of the Privacy Act. This means that Part 5A will not provide for any exceptions to the rules of non-disclosure in the Privacy Act. In particular, some provisions of the Privacy Act provide for personal information to be disclosed if another Act requires or authorises the disclosure of that information. This provision makes it clear that Part 5A does not require or authorise the disclosure of personal information.

Division 3 – Copyright

Proposed section 406-430 Publishing or making copies of applicable documents not an infringement of copyright

601. Part 5A provides for applicable documents to be able to be copied and provided to members of the public and other Ministers (within the limitations set out in the sections described above). Those documents may contain copyrighted literary or artistic works. The copyright in those works would generally be owned by the person or company that originally submitted the material. This section operates so that the Minister can make and provide copies of those documents without infringing the copyright in the documents.

Part 6.5A—Delegation by responsible Commonwealth Minister

Item 288 Proposed section 442B Delegation by responsible Commonwealth Minister

602. Proposed section 442B confers power on the responsible Commonwealth Minister to delegate his or her function or powers to the Secretary of the Minister's Department or an SES employee or acting SES employee in the Department. Subsection (3) excludes from this power of delegation the functions or powers that the Minister has under the principal Act as a member of the Joint Authority, or as Designated Authority, for an offshore area. Those functions and powers relate to petroleum titles and the applicable powers of delegation are in Part 1.3 of the principal Act.

Part 6.5B—Public interest

Item 288 Proposed section 442C Public interest

603. Proposed section 442C is included for avoidance of doubt. It provides that an express requirement in the Act that requires the responsible Commonwealth Minister or the Joint Authority to have regard to the public interest when making a particular decision does not, by implication, prevent the responsible Commonwealth Minister, the Joint Authority or the Designated Authority from having regard to the public interest when making other decisions. The public interest is relevant to the exercise of many discretionary powers under the Act, for example, the powers to approve transfers of titles and dealings in titles under Chapters 3 and 3A.

Part 6.5C—Compensation for acquisition of property

Item 288 Proposed section 442D Compensation for acquisition of property

604. Proposed section 442D is the 'constitutional safety net' provision. It provides a right to compensation in circumstances where the operation of the Act or the regulations would result in an acquisition of property otherwise than on 'just terms' and the relevant provision or provisions would for that reason be invalid by operation of section 51(xxxi) of the Constitution.

Items 291 to 296 Amendments to NOPSA OHS provisions in Schedule 3

605. Schedule 3 contains the provisions of the Offshore Petroleum Act that confer specific powers and functions on NOPSA in relation to the occupational health and safety of the offshore petroleum workforce. Items 291 to 296 extend NOPSA's specific powers and functions to the workforce engaged in 'offshore greenhouse gas storage operations'. This occurs mainly via the definition of 'facility' in clause 4 of Schedule 3.

Item 293 adds to the vessels or structures that are 'facilities' vessels or structures used, or being prepared for use, for a list of offshore greenhouse gas activities.

OFFSHORE PETROLEUM (ANNUAL FEES) AMENDMENT (GREENHOUSE GAS STORAGE) BILL 2008

OUTLINE

606. The *Offshore Petroleum (Annual Fees) Act 2006* ('principal Act') requires the registered holder of the following petroleum titles under the *Offshore Petroleum Act 2006*:
- a work-bid exploration permit;
 - a special exploration permit;
 - a retention lease;
 - a production licence;
 - an infrastructure licence; or
 - a pipeline licence;
- to pay an annual fee for each year of the term of the permit, lease or licence. The amount of the fee is specified in, or calculated in accordance with, the regulations.
607. This Bill amends the principal Act by adding greenhouse gas titles to the titles in respect of which annual fees are payable.

NOTES ON CLAUSES

Schedule 1 Items 1 and 2

608. Item 1 changes the long title of the principal Act to:
- An Act to provide for the payment of annual fees for certain permits, leases and licences under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*, and for related purposes.
609. Item 2 changes the short title to:
- Offshore Petroleum and Greenhouse Gas Storage (Annual Fees) Act 2006*.

Schedule 1 Item 5 Proposed section 4A Fees—greenhouse gas titles

610. Proposed section 4A adds the following greenhouse gas titles to the titles in respect of which annual fees are payable.
- a work-bid greenhouse gas assessment permit;
 - a greenhouse gas holding lease;
 - a greenhouse gas injection licence.

OFFSHORE PETROLEUM (SAFETY LEVIES) AMENDMENT (GREENHOUSE GAS STORAGE) BILL 2008

OUTLINE

611. The Offshore Petroleum (Safety Levies) Act 2003 ('principal Act') imposes safety investigation levy, safety case levy and pipeline safety management plan levy in respect of petroleum facilities and petroleum pipelines in Commonwealth waters and in State and Northern Territory designated coastal waters (ie in the waters covered by the Commonwealth, State and Northern Territory Offshore Petroleum Acts).
612. This Bill amends the principal Act by extending the imposition of those levies to greenhouse gas facilities and greenhouse gas pipelines.

NOTES ON CLAUSES

Schedule 1 Items 1 and 2

613. Item 1 changes the long title of the principal Act to:
- An Act to impose safety investigation levy, safety case levy, and pipeline safety management plan levy, in relation to offshore petroleum and greenhouse gas facilities.
614. Item 2 changes the short title to:
- Offshore Petroleum and Greenhouse Gas Storage (Safety Levies) Act 2003.*

Remaining items

615. The remaining items of this Bill that make substantive amendments to the principal Act do so by changing all references to the Offshore Petroleum Act 2006 to the Offshore Petroleum and Greenhouse Gas Storage Act 2006.
616. The effect of this, together with the amendments to the Offshore Petroleum Act 2006 made by Offshore Petroleum Amendment (Greenhouse Gas Storage) Bill 2008, is that the levies imposed by the principal Act will become payable also in respect of greenhouse gas facilities and greenhouse gas pipelines in Commonwealth waters.
617. The levies will not become payable in respect of any greenhouse gas injection and storage infrastructure in State or Northern Territory coastal waters, even though the amendments made by this Bill will potentially extend the levies to such facilities. This is because the States and Northern Territory are not at present moving to extend the operation of their Offshore Petroleum Acts to greenhouse gas injection and storage operations. The required State and Northern Territory legislative underpinning that is necessary for these levies to apply will therefore not be in place.

OFFSHORE PETROLEUM (REGISTRATION FEES) AMENDMENT (GREENHOUSE GAS STORAGE BILL 2008)

OUTLINE

618. The *Offshore Petroleum (Registration Fees) Act 2006* ('principal Act') imposes fees in respect of the entry in the Register of titles kept under section 253 of the *Offshore Petroleum Act 2006* of a memorandum of the transfer of a petroleum title or of an approval of a dealing in a petroleum title.
619. This Bill amends the principal Act by adding greenhouse gas titles to the titles in respect of which transfers and dealings will attract the imposition of registration fees.

NOTES ON CLAUSES

Schedule 1 Items 1 and 3

620. Item 1 changes the long title of the principal Act to:
An Act to impose, as taxes, fees for the registration under the Offshore Petroleum and Greenhouse Gas Storage Act 2006 of transfers of titles and approvals of dealings
621. Item 3 changes the short title of the principal Act to:
Offshore Petroleum and Greenhouse Gas Storage (Registration Fees) Act 2006.

Schedule 1 Item 17

622. Item 17 adds a new section 6A which imposes a fee in respect of the entry in the Register kept under proposed section 298-253 of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* of a memorandum of the transfer of a greenhouse gas title.
623. Item 17 also adds a new section 6B which imposes a fee on the entry in the Register of the approval of a dealing in a greenhouse gas title.

**AMENDMENTS TO OFFSHORE PETROLEUM LEGISLATION TO
PROVIDE FOR GREENHOUSE GAS TRANSPORT, INJECTION AND
STORAGE IN COMMONWEALTH WATERS**

REGULATION IMPACT STATEMENT

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AMENDMENTS TO OFFSHORE PETROLEUM LEGISLATION TO PROVIDE FOR GREENHOUSE GAS TRANSPORT, INJECTION AND STORAGE IN COMMONWEALTH WATERS

1. REGULATORY PROPOSAL

Geological storage has been recognised internationally as having important potential to significantly reduce greenhouse gas emissions, and is integral to a number of emerging low-emission energy and industrial technologies. However, while there is good understanding of many of the technology issues, international experience of long term geological storage is extremely limited. If expansion of the use of geological storage is to be feasible, investors will require certainty about the regulatory environment, and the public will require confidence that risks are well controlled.

The Commonwealth Government has been working towards the development of such regulation in Commonwealth waters, that is, those areas seaward of three nautical miles and within Australia's continental shelf. These areas are already the location of an active offshore petroleum industry, which itself has rights to the subsurface provided by well established petroleum law. The Commonwealth's regulatory proposal is for the introduction of amendments to this petroleum legislation to regulate greenhouse gas transport, injection and storage in these waters, in a way which balances those rights with the needs of the community and potential investors.

Problem

The problem to be addressed is how to apply best practice regulatory principles for geological storage in Commonwealth waters.

Much of the analysis of alternative regulatory approaches has already been provided by COAG's Ministerial Council on Minerals and Petroleum Resources (MCMPR), which in 2005 released *Carbon Dioxide Capture and Geological Storage: Australian Regulatory Guiding Principles*, which constituted a Regulation Impact Statement (RIS), which is available from www.ret.gov.au/general/resources-CCS.

Key decisions associated with the implementation of these guiding principles in the case of Commonwealth legislative amendments are discussed further in Section 3 below.

The Regulatory Guiding Principles highlighted the challenges in reconciling views of stakeholders in developing a regulatory approach. Since the release of the MCMPR report the Commonwealth has continued to engage State/Territory and other stakeholders with the view to better understanding stakeholder impacts and ensuring consistency in any regulatory regime. This consultation process, which is described in more detail in Section 2, has helped to address a number of threshold implementation issues, but has also highlighted that many stakeholders are withholding judgement on the regulatory proposal until they can consider the detail of any draft legislative amendments. A key challenge in addressing the problem will

be providing stakeholders with sufficient detail of the regulatory proposal so they can make informed comment on its impacts.

Scale of the Problem

The risks associated with this regulatory proposal are that the framework may act as a disincentive for petroleum or geological storage activities, that geological storage activities might go ahead in a manner which damages other rights or resources, or that the stored greenhouse gas is allowed to leak. There are also the other risks common to the petroleum industry, in areas such as health, safety or environment.

In considering the regulatory proposal, the potential scale of a new greenhouse gas transport, injection and storage industry in Commonwealth waters has to be taken into account. There are likely to be only a relatively small number of projects in offshore waters in the first five years. These projects, however, are likely to be very large scale. Overall it is estimated that no more than ten release areas would be the subject of substantial evaluation as storage opportunities in this timeframe. The number of projects to progress to injection and storage is likely to be no more than half this.

Experience with the permanent storage of large quantities of gases is limited. However greenhouse gas transport, injection and storage activities are expected to be close analogues to offshore petroleum in scale and complexity. Exploration will cost from hundreds of thousands to multiple millions of dollars, and the costs of a greenhouse gas transport, injection and storage project would be in terms of hundreds of millions or some billions of dollars. Experience from the petroleum industry suggests such projects necessitate some complexity in regulation.

Issues Not Covered in this RIS: Regulations and Guidelines

It should be stressed that the Government has yet to make any decision on the *regulations* and *guidelines* to cover things such as public interest tests, impact significance tests, assessments and approvals, monitoring and verification, financial issues and post closure responsibility. Aside from acknowledging those used in offshore petroleum as a useful starting point for many of these instruments, it appeared inappropriate to pursue this level of detail without first soliciting clearer feedback from stakeholders on the proposed legislative amendments. As a consequence, many issues relating to the final cost of regulation also cannot be assessed at this stage, and will be the subject of a future analysis.

Objectives

The aim of the legislation is to provide an enabling framework for objective-based regulation which will allow a new greenhouse gas transport, injection and storage industry to operate in Commonwealth waters while:

- meeting the industries' need for investment certainty;

- meeting community expectations by addressing issues such as safe and secure storage of greenhouse gases, protection of the environment and occupational health and safety;
- providing a system for managing the rights and needs of other users of the sea and the subsurface (including the offshore petroleum industry);
- providing a modern regulatory regime that encourages best practice and continuous improvement.

The success in meeting these objectives will be tested, in this stage of the process, through stakeholder comments on the exposure draft of the legislation. In the next stage of the process, stakeholder comments on the details of regulations and guidelines, when these are developed, will provide a further measure of appropriateness of the framework. Stakeholder reaction when individual projects are being developed and are subject to the regulatory process will provide a final test. We would also propose that the legislation be reviewed five years after it commences.

2. CONSULTATION

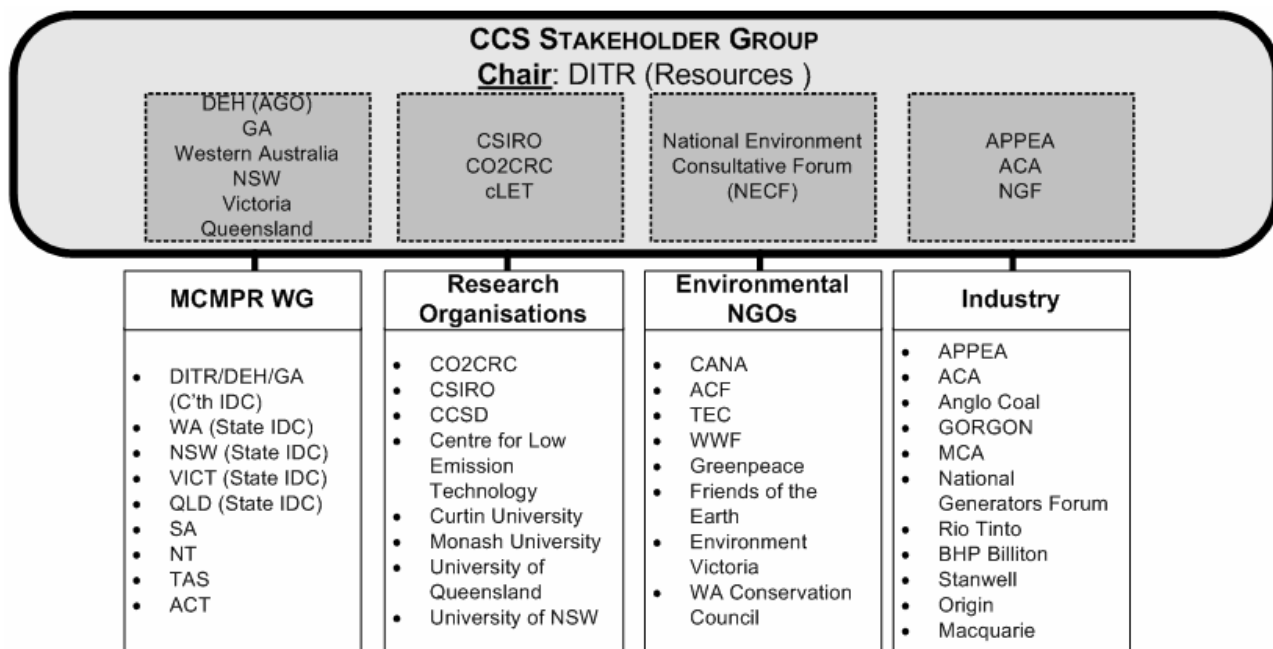
Following the release of the Regulatory Guiding Principles, the MCMPR Contact Officers Group met in April 2006 to begin work on a discussion paper addressing the implementation of a national regulatory regime for carbon capture and storage (CCS) projects in Australia. The MCMPR Contact Officers Group drew membership from the Commonwealth and each State and Territory, with each member responsible for consolidating comments raised from consultation within their jurisdiction.

In early July 2006, a draft of the discussion paper entitled *"Implementing an Australian Regulatory Framework for Carbon Capture and Geological Storage"* was circulated by the Contact Officers Group, setting out options on how the Regulatory Guiding Principles might be applied to greenhouse gas injection and storage in Commonwealth waters.

This draft paper was circulated to members of both the Inter-Departmental Committee (IDC) on CCS and the CCS Stakeholders Group (see below for membership), inviting comment. A CCS Stakeholder Group meeting was held on 26 July 2006 to discuss the draft paper and assist in clarifying any issues or concerns held by stakeholders on the proposal. Following from the meeting, the then DITR invited formal submissions from stakeholders on the proposed legislative model described in the draft discussion paper.

Nine submissions were received in response to the paper. Some petroleum companies were concerned that, despite the proposed no significant negative impact test, greenhouse gas injection operations could still impact adversely on their activities. Other non-petroleum companies were concerned that the 'no significant impact test' could effectively quarantine prospective storage sites for many decades. Many stakeholders highlighted the importance of the Government in providing

further detail of its proposed legislation to allow better assessment of how these concerns would be addressed. Specific issues are discussed further under Section 3 of this statement. In general, the submissions were supportive of the regulatory model as it related to proposed legislative amendments.



On 28 July 2006 the MCMPR Standing Committee of Officials (SCO) gave in principle support to the legislative model presented in the discussion paper. However, full endorsement was not given due to outstanding issues associated with overlapping rights, managing conflict over property rights, and clarification of long term liability and decommissioning.

Following on from this SCO meeting, the Contact Officers Group undertook to revise the CCS discussion paper based upon stakeholder comments, separately outlining the proposed legislative framework for access and property rights for CCS in offshore Commonwealth jurisdiction and summarising the further work required to underpin the legislation, particularly long term liability and decommissioning issues.

The finalised discussion paper "Implementing an Australian Regulatory Framework" was endorsed out of session by the SCO group in November 2006. The main elements of this framework were:

- the use of existing Commonwealth legislation (the *Offshore Petroleum Act 2006*) to provide a regime for access and property rights similar to those used for petroleum.
- an acreage release system similar to that used for petroleum;
- protection of the rights of pre-commencement petroleum title holders by requiring the greenhouse gas operator to satisfy the regulator that there would be no significant adverse impact on petroleum operations;

- for post commencement titles, a public interest test to decide which activity should proceed, if the petroleum and greenhouse gas operations could not co-exist;
- a closure procedure which involved post-injection monitoring to provide the regulator with assurance that the injected substance was behaving as predicted before the operator could relinquish the title.

A working group consisting of representation from the then DITR, the Australian Government Solicitor and Geoscience Australia, commenced development of drafting instructions for the legislation in early 2007 with drafting of the proposed legislation ongoing through 2007.

A meeting of the MCMPR Contact Officers Group was held in March 2007 to discuss regulatory requirements and report on progress of the drafting of proposed CCS legislation. In June 2007, the Environmental Protection and Heritage Council Standing Committee of Officials (EPHC) agreed to progress the development of nationally consistent guidelines for the environmental assessment and regulation of carbon dioxide and geological storage and to establish a Joint Officials Working Group co chaired by the MCMPR and the EPHC.

Following substantial completion of the exposure draft of the proposed legislation, an IDC meeting was held on 12 November 2007 to provide an overview and invite comment on the exposure draft prior to release for broader public consultation. No significant comments were received.

3. IMPLEMENTING THE REGULATORY PROPOSAL IN COMMONWEALTH WATERS

The 2005 *Regulatory Guiding Principles* highlighted a number of areas which required careful consideration in preparing regulation on carbon capture and storage. Work to implement a regulatory framework identified 12 threshold questions that had to be addressed. Some of these had been addressed in a general sense in the 2005 RIS. Thus, in some cases the questions become ones of what regulation should be used, while in other cases the question of whether regulation is needed also had to be addressed. In its regulatory proposal the Commonwealth has endeavoured to answer these implementation questions in the specific circumstance of Commonwealth waters, while trying to ensure consistency with any eventual State/Territory regime. As was the case when the regulatory principles were first developed, there is little international experience in this type of regulation which is relevant to Australia, so many of these choices have been made from first principles.

The questions were:

- 1) What legislation should be used to provide the access and property rights?
- 2) What management system is needed for the release and award of exploration areas?
- 3) What regulation is needed to manage environmental issues?
- 4) What regulation is needed to manage occupational health and safety issues?
- 5) What regulation is needed for site management, including monitoring and verification, serious situations, and reporting?
- 6) What, if any, regulation is needed in respect of site closure?
- 7) What regulation is needed to manage transport?
- 8) What, if any, regulation is needed in respect of long term liability?
- 9) What, if any, regulation is needed in respect of performance bonds and guarantees?
- 10) What, if any, regulation is needed to manage interactions with the petroleum industry?
- 11) What, if any, regulation is needed to manage interactions with other users of the sea?
- 12) Who should be the regulator?

The issues and the approaches to them are closely interrelated. Thus, for example, the choice of the legislative model is likely to have major implications for the form of much of the required regulation. At a different level, arrangements relating to monitoring and verification will be closely linked to the expected behaviour of the greenhouse gas substance in the reservoir which will dictate in large part the options for dealing with serious situations.

Approaches to these issues are analysed below.

3.1. Legislation

The 2005 RIS concluded that legislation is required to increase industry certainty, increase clarity as to community expectations, increase consistency and transparency and reduce risks to the environment, health and safety.

To implement this conclusion for Commonwealth waters, four options were considered:

- Project specific legislation;
- Stand alone legislation;
- Amendments to the *Offshore Petroleum Act 2006* to provide a legislative framework for greenhouse gas injection and storage;
- Amendments to some other existing legislation.

Handling all the issues requiring legislation in a single framework is desirable. Such an approach will significantly reduce complexity and is consistent with the Guiding Principle of adapting existing systems where possible.

Project specific legislation

Project specific legislation could be developed. However the nature of greenhouse gas storage and injection projects is likely to be such that each one would have to be developed on a case-by-case basis for defined projects. As a result, project proponents would have no certainty as to their future access until after they had undertaken considerable initial exploration. Moreover, there remains the question of under what framework initial exploration activities would be undertaken. Other issues include the time required for new legislation each time a new project was proposed and the very cumbersome arrangements that would be needed to manage project variations or changes in expected practices. In addition, such an approach would be unlikely to provide for consistent regulation of projects.

This option is not consistent with the use of established legislative and regulatory arrangements as concluded in the guiding principles.

Stand alone legislation

Stand alone legislation is feasible and could provide a clean platform for a regulatory framework which avoids perceptions of the greenhouse gas transport, injection and storage legislation being the province of the petroleum industry.

Stand alone legislation would require a large amount of subordinate regulation relating to issues such as the environment and occupational health and safety compared with the use of an existing platform.

Managing the interactions between the greenhouse gas industry and the petroleum industry will require substantive amendments to the OPA in relation to post-commencement petroleum titles (see section on interactions with the petroleum industry below). Management of these interactions will be greatly simplified if these arrangements are covered by a single regulatory framework.

The use of separate legislation also raises the question of ‘future proofing’ of the regulatory system. It gives less certainty that all matters relating to any future amendments to legislation or regulations dealing with either greenhouse gas activities or petroleum activities, will take the other industry into account.

Stand alone legislation could also be developed as a ‘satellite act’ of the OPA which would allow the many definitions and subsidiary regulation of the OPA to be used, thus addressing the above issues. Such an Act would operate by invoking the OPA for the many definitional issues that arise. However, any company wishing to undertake greenhouse gas transport, injection and storage would have to refer to both Acts, with some matters potentially being addressed in one and some in another. This has the potential to lead to confusion as to which Act applies in specific

circumstances, especially in relation to managing interactions with the petroleum industry, where different aspects of many relevant matters would appear in different Acts. The option of a satellite Act was therefore discarded as being cumbersome and potentially inefficient.

Stand alone legislation is not consistent with the conclusion of the 2005 RIS that established legislative and regulatory arrangements should be used wherever possible.

Amendment of the Offshore Petroleum Act 2006

The *Offshore Petroleum Act 2006* (OPA) will replace the existing *Petroleum (Submerged Lands) Act 1967* (PSLA) as soon as certain (minor) State/Territory procedures are completed. This is expected to happen during the first half of 2008.

The existing access and property rights arrangements provided to the petroleum industry through the PSLA have been operating since 1967 and have proven to be effective and efficient. This is demonstrated through petroleum industry investment in exploration of oil and gas in Australia's offshore areas. It has also proven an effective mechanism for the administration of activities.

Most of the technologies, equipment and techniques used for greenhouse gas injection and storage will be effectively identical to those in common use in the petroleum industry. These include such activities as acquiring seismic data, drilling of wells, and the transport and handling of large quantities of fluids. Offshore petroleum production facilities will also have a great deal in common with offshore greenhouse gas injection facilities, including the basic structural, equipment associated with wellheads and compressors.

Worldwide, the petroleum industry has significant relevant experience, including injection of:

- large quantities of natural gas (predominately methane) either for permanent disposal of natural gas that is produced associated with crude oil in remote areas where there is no market for the natural gas;
- as part of gas recycling projects where natural gas is reinjected to increase the volume of liquids produced;
- carbon dioxide for enhanced hydrocarbon recovery;
- carbon dioxide for disposal.

In engineering terms, such operations are almost identical to the transport and injection of greenhouse gases. However, experience with permanent storage is limited.

The OPA provides a framework which already addresses most of the activities identified as needing regulation above in regards to petroleum. Many of the areas identified by the 2005 RIS as requiring government regulation are very similar to matters dealt with under the OPA in respect of petroleum.

Currently, regulation under the PSLA applies to these activities when undertaken as part of petroleum operations. These regulations under the PSLA relating to petroleum will be replaced with similar regulations under the OPA.

Existing regulation under the PSLA includes:

[*Petroleum \(Submerged Lands\) \(Management of Well Operations\) Regulations 2004*](#)
[*Petroleum \(Submerged Lands\) \(Data Management\) Regulations 2004*](#)
[*Petroleum \(Submerged Lands\) \(Management of Safety on Offshore Facilities\) Regulations 1996*](#)
[*Petroleum \(Submerged Lands\) \(Occupational Health and Safety\) Regulations 1993*](#)
[*Petroleum \(Submerged Lands\) \(Management of Environment\) Regulations 1999*](#)
[*Petroleum \(Submerged Lands\) \(Pipelines\) Regulations 2001*](#)
[*Petroleum \(Submerged Lands\) \(Datum\) Regulations 2002*](#)
[*Petroleum \(Submerged Lands\) Regulations 1985*](#)
[*Petroleum \(Submerged Lands\) \(Diving Safety\) Regulations 2002*](#)

Because of the similarity of the industries, these regulations could be extended to regulate identical activities undertaken as greenhouse gas transport, injection and storage operations.

These regulations are currently being reviewed with the aim of consolidation into a lesser number of regulations, removal of any inconsistencies and to streamline approvals processes. The outcome of this review will apply equally to greenhouse gas transport, injection and storage regulation.

Many of the companies undertaking greenhouse gas transport, injection and storage are expected to be petroleum companies, acting either to store greenhouse gases that they have produced or as an agent (or partner) of the generating industry.

Incorporating the amendments into the OPA will increase the length of this already large Act. While the use of the OPA could lead to perceptions that greenhouse gas transport, injection and storage is solely the province of the petroleum industry, it is inevitable that there will be significant interactions between the greenhouse gas injection and storage and the petroleum industries. Bringing all requirements within a single Act will make reference and cross reference easier for users.

Amendments to other legislation

Other legislation that was considered included the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC) and the *Environment Protection (Sea Dumping) Act 1981*.

The EPBC Act may be triggered by projects or activities which are likely to have a significant impact on matters of national environmental significance including the Commonwealth marine environment. Greenhouse gas injection and storage projects could trigger the Act, but some aspects of exploration may not have significant impacts on the environment. The EPBC Act applies to specific environmental matters only and does not provide any basis for an access and property rights regime.

The Sea Dumping Act puts into effect the requirements of the 1996 Protocol to the *London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter* (the London Protocol). The injection and storage of greenhouse gases in offshore areas will require approval under the Sea Dumping Act. However, like the EPBC, it provides no basis for an access and property rights regime.

The *Offshore Minerals Act 1999* could also provide a basis. While it could be used to establish an access and property rights regime, there are few of the synergies that are available from using the OPA.

Amendment of these Acts, therefore, would require new sections which would be effectively indistinguishable from stand alone legislation.

Conclusions

	Potential Disadvantages	Potential Advantages
Project Specific Legislation	Problems of consistency, industry certainty	
Stand Alone Legislation	Requires a new framework for providing access and property rights Will require extensive cross reference to the OPA to manage interactions with the petroleum industry	Single purpose legislation will be shorter

Offshore Petroleum Act	Act becomes very large Could be perceived as making greenhouse matters the province of the petroleum industry	Draws on well established and understood framework for providing and managing access and property rights Provides potential for using much of the same management framework, thus reducing the need for new sets regulations, dealing with what are essentially identical activities Provides for integrated management of any issues relating to integration with petroleum activities
Use different Legislation	No other legislation provides a basis for providing and administering access and property rights	

Recommendation

That the regulatory framework for greenhouse gas transport, injection and storage be implemented by amending the OPA and its attendant regulations to deal with the many aspects of a greenhouse storage project would have in common with petroleum industry operations.

3.2. Management of Release and Award of Exploration Areas

The management and award of exploration areas to prospective greenhouse gas operators was not addressed directly in the 2005 RIS. Nevertheless, any system of access and property rights will need a system to determine who obtains those rights.

Work to date, especially the GEODISC project, has identified areas which may provide suitable storage sites and made an estimate of Australia's potential storage capacity. In some cases, more specific site studies have been undertaken by the Cooperative Research Centre for Greenhouse Gas Technologies (CO2CRC). This pre-competitive geoscientific work provides a starting point for the detailed evaluation of specific sites, which involve data acquisition and analysis, that is needed to prove up sites to the level required.

There are two basic options for allocating areas to prospective greenhouse gas operators so that they can explore for and assess storage sites which they may then use for storage operations:

- direct allocation to potential users based on some criteria such as perceived need;
- some form of competitive process allowing selection of a winning bid.

A competitive process is used for petroleum titles in Commonwealth waters, which commences with the selection of areas for release for bidding by companies wishing to explore that area. Selection is based on the geological potential of the area to contain hydrocarbons, and on taking into consideration possible impacts on environmental values and other activities, such as fisheries, navigation and defence. This process provides a basis for deciding what areas are to be released and what, if any, special conditions may apply. The areas are then released for bids and allocated on the basis of published selection criteria. Bids are assessed in terms of the work program commitments that bidders make and a requirement of the title is that these work programs be met. This process has been in use for many years and is proven and effective.

The OPA also makes provision for the use of cash bidding (which involves bidders tendering a 'cash' amount for the rights to the area). These provisions are rarely used.

A similar process could be used for greenhouse gas exploration titles. It is proposed that allocation would be based on work program bidding or cash bidding in the same way as for petroleum.

Initial screening of areas prior to release will be essential to avoid potentially intractable issues after areas have been awarded. This will be required irrespective of the allocation process chosen to ensure that areas are appropriate and the needs of other users of the sea are taken into account.

An alternative to the competitive bidding processes is the direct allocation of areas to project proponents. This would provide greater certainty to potential greenhouse gas transport, injection and storage proponents at an early stage. However, it is not an open and transparent process and could leave the regulator in the position of being concerned that the operator is not necessarily the best qualified to assess and operate the site. This lack of transparency would likely lead to strong criticism and claims of discrimination.

This basic model was put forward in the 2006 document *Implementing an Australian Regulatory Framework for Carbon Capture and Storage* and drew a variety of comment from stakeholders.

Some stakeholders have argued that some prospective areas for greenhouse gas storage should be allocated directly to potential greenhouse storage companies. This was put forward as a means of reducing uncertainty about access to sites and to

promote a more rapid uptake of greenhouse gas storage technology. Some of these proponents have also argued that, given the need to reduce greenhouse gas emissions, this allocation should be based purely on public interest and possibly over-ride the rights of pre-commencement petroleum titles.

Overall, it is expected that the market, operating in tandem with a bidding system should provide the best results. To capitalise on the investment in assessing a greenhouse storage site, the operator would have a very strong incentive to do business with a greenhouse gas producer (and vice versa).

Substantial further feedback from stakeholders is expected when the exposure draft of the legislation is released.

Conclusion

The advantages and disadvantages of the options are:

	Potential disadvantages	Potential advantages
Competitive bidding process	Less certainty for greenhouse gas storage proponents	Provides a transparent market based process for allocation of areas
Direct allocation of areas	Not a transparent process No assurance that the 'best' potential applicant is awarded the area	Provides greenhouse storage proponents with greater certainty as to access

Recommendation

That the release and award of areas for exploration for greenhouse gas storage sites use a competitive process similar to that used for petroleum.

3.3. Management of the Environment

Environmental risks for an offshore greenhouse gas transport, injection and storage industry will be very similar to those for the petroleum operations. These risks include disturbance of habitat during construction, operation and decommissioning and potential impacts on migratory species. There are also specialised risks associated with the impact on any leakage of greenhouse gases to the environment, including, for example, the potential impacts of acidification of water. This, however, is offset by the much lower risk of petroleum spills to the environment, compared with the petroleum industry. Ensuring that risks are managed is an essential consideration. This is particularly the case given that the storage of greenhouse gases is a new industry where there is no significant practical experience.

Environmental management was one of the matters considered in the 2005 RIS as part of the assessment and approvals process section. The RIS concluded that a “consistent management approach, which minimises risks associated with CCS processes, should be applied to assessment and approval processes for CCS. This would best be achieved through regulation whereby existing regulation be amended or added to as appropriate ... and provides for similar treatment to other comparable industries.”

In the absence of clear, consistent and transparent environmental management framework, it will be difficult for operators to perform in a way that meets the expectations of the community.

Given that the 2005 RIS concluded that regulation is required, there are two options:

- . Use of arrangements similar to those used for the offshore petroleum industry;
- . Development of new arrangements.

Under existing arrangements for the offshore petroleum industry environmental management is undertaken through the *Environmental Protection and Biodiversity Conservation Act (EPBC)* and the *Environment Protection (Sea Dumping) Act 1981* together with [Petroleum \(Submerged Lands\) \(Management of Environment\) Regulations 1999](#). Major offshore projects usually require an impact assessment process. Conditions are usually applied to the project as an outcome of this process. The existing petroleum regulations are outcome focussed and have been designed to promote the adoption of emerging best practice.

Experience of applying these three streams of management in the petroleum industry has resulted in a system which minimises overlaps, while providing an integrated approach to environmental management.

Developing new arrangements would only duplicate existing arrangements. Unless specifically over-ruled, the EPBC Act and the Sea Dumping Act will continue to apply to offshore greenhouse gas, transport and injection projects. No purpose is seen in making such an exception, as they would need to be replaced by equivalent new regulation. Similarly, no useful purpose would be served in replacing the [Petroleum \(Submerged Lands\) \(Management of Environment\) Regulations 1999](#), with a new system for managing environmental issues.

No specific comments have been received from stakeholders on this proposed approach.

There will, however, be a need to address issues relating specifically to the safe and secure storage of CO₂. This is addressed in Section 3.5.

Conclusions

The advantages and disadvantages of the options are:

	Potential disadvantages	Potential advantages
Use of petroleum industry model		Improved efficiency through the use of proven system
Develop new arrangements	Would require duplication of existing arrangements	

Recommendation

That management of environmental impacts (excluding issues relating to the safe and secure storage of the greenhouse gas substance) be done using the existing framework applied to petroleum activities.

3.4. Management of Occupational Health and Safety Issues

There are potential occupational health and safety risks associated with most industrial processes. Greenhouse gas transport, injection and storage is no exception. Occupational health and safety risks for an offshore greenhouse gas transport, injection and storage industry will be very similar to those for the petroleum operations, involving many processes and activities in common. Ensuring that these risks are managed is an essential consideration. This is particularly the case given that the storage of greenhouse gases is a new industry where there is very limited practical experience.

Occupational health and safety was one of the matters considered in the 2005 RIS as part of the assessment and approvals process section. The RIS concluded that a “consistent management approach, which minimises risks associated with CCS processes, should be applied to assessment and approval processes for CCS. This would best be achieved through regulation whereby existing regulation be amended or added to as appropriate ... and provides for similar treatment to other comparable industries.

In the absence of clear, consistent and a transparent management framework, it will be difficult for operators to perform in a way that meets the expectations of the community.

Given that the 2005 RIS concluded that regulation is required, there are two options:

- Use of arrangements similar to those used for the offshore petroleum industry;
- Development of new arrangements.

Existing arrangements for the offshore petroleum industry involve an occupational health and safety process, which is undertaken through the National Offshore Petroleum Authority (NOPSA). NOPSA was established in 2005 to introduce best practice to occupational health and safety outcomes for Australia’s offshore petroleum industry. As part of this process, conditions are usually applied to the project.

Overall, for the greenhouse gas industry, compliance with occupational health and safety requirements is likely to be slightly less onerous than compliance for petroleum operations due to the fact that CO2 is not flammable. However, a minor additional matter for consideration would be that greenhouse gas transport, injection and storage is a new industry and the expertise required to identify any unique features, for example, failure modes, may require the development of expertise not currently held by proponents.

The role of NOPSA could be expanded to include greenhouse transport, injection and storage within its scope of activities.

Any other approach would require additional legislation and regulation covering essentially identical activities and the establishment of a body to undertake the regulation which would require the same skill set as are already available in NOPSA (noting that these skills are both expensive and in short supply). This approach would inevitably lead to increased costs.

No specific comments have been received from stakeholders on this proposed approach.

Conclusions

The advantages and disadvantages of the options are:

	Potential disadvantages	Potential advantages
Use of petroleum industry model		Improved efficiency through the use of proven system
Develop new arrangements	Would require duplication of existing petroleum arrangements Issue of access to expertise	

Recommendation

That management of occupational health and safety issues be done using the existing framework and institutions applied to petroleum activities.

3.5. Management of Storage Sites

Leakage from storage sites poses possible environmental and health risks. It also has the potential to partially negate the purpose of storage which is to prevent emission of greenhouse gases to the atmosphere. In addition, even if no leakage of greenhouse gas to the environment occurs, undesirable migration could impact adversely on other resources, such as petroleum or potable water.

Careful site selection and effective regulatory oversight was identified by the Intergovernmental Panel on Climate Change Report (available from <http://www.ipcc-wg2.org/index.html>) as fundamental to ensuring safe and secure storage. Numerous specialists have also reached the conclusion that, with appropriate site selection and effective monitoring and verification, the probability of leakage is very low. However, the potential scale of costs for remediation could be high. This is also the area where community concerns are likely to be high.

Characterisation and management of storage sites was one of the matters considered in the 2005 RIS as part of the assessment and approvals process section. The RIS concluded that a “consistent management approach, which minimises risks associated with CCS processes, should be applied to assessment and approval processes for CCS. This would best be achieved through regulation whereby existing regulation be amended or added to as appropriate ... and provides for similar treatment to other comparable industries.”

There is no existing regulation that could readily be adapted for this purpose. However, the administration of the offshore petroleum industry involves the approval of field development plans which provides a plan for how the resource will be produced and the field managed.

Given that the 2005 RIS concluded that regulation is required, the issue is one of what type of regulation this should be. There are two basic options:

- The proponent submits a plan to the regulator for approval for managing the site using outcome oriented criteria;
- prescriptive management plans overseen by the regulator.

Prescriptive criteria are not well suited to situations where the circumstances of each individual project are likely to be quite different (for example, different quantities and injection rates, different geology). Each one will need to be considered on a case-by-case basis. What might be an acceptable deviation in the migration path of the injected substance in one case, might pose unacceptable risks in another. Moreover, the lack of practical experience with greenhouse transport, injection and

storage projects would make it effectively impossible to develop sensible prescriptive criteria.

An outcome oriented approach to regulation will allow site specific factors to be taken into account and provide a basis for the adoption of emerging best practice.

As a result, an outcome oriented approach is preferred, analogous to that used for offshore petroleum field development plans. Thus, the proposed legislation requires an operator to lodge a comprehensive site plan for approval before activities can proceed. Such a site plan would have to demonstrate, to the satisfaction of the regulator, that the site and its management would result in 'safe and secure' storage. The site plan would need to identify risk factors and show that risks had been reduced as low as reasonable practical. The regulator would then have to decide whether these risks, taking into account potential mitigation and remediation strategies, were acceptable.

While this part of a site plan would be large, requiring substantial data acquisition as background, and its analysis, this work would have to be undertaken by any responsible operator, irrespective of whether or not it was required by regulation. As a result, the actual compliance cost would be modest, involving the preparation of the plan in a form acceptable to the regulator (but based entirely on internal work that the operator would have had to undertake in any event) and its submission.

No formal comments have been received from stakeholders on this proposal, but informal discussions have been supportive.

Conclusions

The advantages and disadvantages of the options are:

	Potential disadvantages	Potential advantages
Use of site plan model	Lower certainty as to regulator requirements	Allows for use of objective based regulation Provides flexibility to deal with site specific factors Allows for rapid adoption of best practice and new technologies
Use of prescriptive regulation	Does not provide site specific flexibility Does not allow for improvements in best practice	Better certainty of regulator requirements Simplifies submission and approvals process, but not necessarily outcomes

	Creates high levels of duty of care responsibilities for the regulator	
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Recommendation

That a greenhouse gas injection licence not be granted until a project specific site plan is approved by the regulator. The plan should contain detailed modelling of the expected behaviour of the greenhouse gas substance after injection, including the expected migration path or paths.

Monitoring and verification

Monitoring and verification is required to ensure operationally safe performance of greenhouse gas transport, injection and storage projects and must form an integral part of storage site management.

Current scientific understanding indicates that effective monitoring and verification of the stored greenhouse gas substance is a key component for minimising risks.

The 2005 RIS concluded that regulation was required for monitoring and verification to enable “the generation of clear, comprehensive, timely accurate and publicly accessible information that can be used to effectively and responsibly manage environmental, health, safety and economic risks”.

It is envisaged that monitoring should be carried out pre-injection, continuously during injection and for an appropriate period thereafter. Monitoring could involve ambient air monitoring, water monitoring, shallow subsurface monitoring, as well as a range of techniques to monitor the movement of the injected substance in the storage formation. Some monitoring may be continuous, while others might be carried out at intervals, with the frequency depending on site specific factors.

Although projects will be assessed on a case-by-case basis, any monitoring and verification system needs to ensure industry provides accurate and relevant information, which is readily available to the community and independently verifiable.

Effective monitoring can also verify that the amount of greenhouse measured has actually been injected as well as its behaviour over time. In the long-term, monitoring can confirm the continued storage of the injected greenhouse gas substance stream in its intended location or storage formation.

Verification of the methods used in monitoring and the data collected will bring confidence to the process. This is likely to come in the form of operating and reporting standards or objectives that apply to all projects to deliver a high degree of certainty to operators and the community.

Monitoring requirements will be highly dependant on site specific factors and is closely related to the detection of and reaction to any incidents that occur, and hence to mitigation and remediation actions that might be required. For these reasons, it would be most efficient if monitoring was integrated with the site plan. Specifically, the proponent could be required to propose a monitoring and verification plan that satisfied the regulator that any serious events in the reservoir would be detected in a timely manner. Timely detection of incidents is essential if any remedial or mitigation action is required.

No adverse comments on the form of regulation relating to monitoring and verification have been received in consultations to date. A number of stakeholders, however, have strongly supported the need for such regulation, although there has been no substantive feedback on the form of such regulation.

Environmental management of greenhouse gas projects is also the subject of a Joint Officials Working Group under the Environment Protection and Heritage Council. This work is focussing on onshore jurisdictions as opposed to Commonwealth offshore waters, which is the subject of this RIS. This process will drive national consistency.

Conclusions

Integration of monitoring and verification requirements into the site plan provides the linkage that is needed between different facets of site management. This also provides for an objective based approach to regulation in this area.

Recommendation

That the site plan contain a comprehensive monitoring and verification program to be implemented by the licensee throughout the injection phase and post-injection phase of the project, to ensure that the injected greenhouse gas substance is behaving as predicted or, if it is not, to identify any risks to the environment, safety or other resources.

Remediation and mitigation

If monitoring shows that the storage site is leaking, behaving in way which is likely to lead to leakage to the environment, or impact on other resources, then remediation or mitigation strategies may need to be implemented.

The site plan could provide a basis for establishing remediation and mitigation, which should set out strategies for management of identified risks. Compliance to the site plan, including these aspects, should be a condition of the licence.

Remediation and mitigation strategies could involve very large expenses, for example drilling of wells and injection or extraction of large quantities of fluids. If the injected greenhouse gas substance does behave otherwise than predicted, or looks as though it may do so, the regulator will need to have extensive powers to direct the

licensee to take action to eliminate, mitigate or manage any risk posed by the situation, including the suspension or permanent cessation of operations, as well as the taking of action to prevent or remedy any damage that might arise.

Remediation and mitigation strategies will be highly dependant on site specific factors and is closely related to monitoring and verification which provides the mechanism for detecting serious events. For these reasons, it would be most efficient if remediation and mitigation strategies were integrated with the site plan. Specifically, the proponent could be required to propose remediation and mitigation strategies that satisfied the regulator that any serious events in the reservoir could be managed in an acceptable manner.

No consultations have taken place in relation to the regulation of remediation and mitigation to date, but it will be one of the matters for consideration by stakeholders once an exposure draft of the legislation is released.

Conclusions

Integration of remediation and mitigation strategies into the site plan provides the linkage that is needed between different facets of site management. This also provides for an objective based approach to regulation in this area.

Recommendation

That the site plan specify the safeguard measures that will be implemented to ensure that the injected greenhouse gas substance does not deviate from the expected migration path(s) and does not escape into the atmosphere. This needs to be supported by regulatory powers to direct outcomes in the event that a serious situation occurs.

Reporting

Information will be required on the volume and location of greenhouse gas emissions that have been abated and are stored underground which are accurate enough to meet current and future inventory reporting and commercial requirements; and to engender public confidence.

While reporting was not considered as a separate matter in the 2005 RIS, it is perceived as an integral part of monitoring and verification.

There is a need to develop and establish procedures for carbon dioxide accounting for greenhouse gas storage projects, which include accounting in the event of any leakage of the greenhouse gas substance. These procedures could form the basis of possible future greenhouse gas transport, injection and storage standards, including standards for certification, auditing, management and accounting for stored carbon dioxide. This need will be addressed in the next stage of the process when the detailed regulations are developed.

Reporting is likely to require regular reports of the amount of greenhouse gases stored, together with any losses from the transport and injection processes. Leakage of stored greenhouse gas will be a matter that will need to be considered more broadly under the monitoring and verification and mitigation and remediation powers. While reporting may depend on the requirements of emissions trading scheme and any international obligations, this basic data is likely to meet most requirements.

Under the existing system for the petroleum industry there is a framework of regulatory driven reporting requirements. Overall, however, reporting for the greenhouse gas industry is likely to be no more onerous than the reporting required of the petroleum industry and consistent with the reports that operators would have to compile to secure abatement permits under any national or international accounting framework.

Conclusions

Reporting requirements will likely involve a degree of prescriptive regulation (for example, frequency of reports and nature of information required) to ensure that reporting arrangements are consistent between projects and with national and international data requirements.

Recommendation

That detailed regulations on reporting requirements be developed, having regard to need of the community to understand fully the fate of the greenhouse gas substance and any requirements that might be imposed through a carbon trading scheme and international reporting obligations.

3.6. Site Closure Process

Scientific advice is that the behaviour of an injected greenhouse gas substance is likely to change markedly once injection ceases, when migration rates may decrease substantially. It will therefore be necessary to continue to monitor the behaviour of the injected substance after injection ceases so that the community can be assured that the greenhouse gas substance is behaving as predicted and not posing any unacceptable risks.

In addition, as part of the site closing process, the licensee will be required to remove or decommission any structures, plant and equipment, to plug any remaining exploration or injection wells and make good any damage to the seabed and subsoil. This requirement is effectively identical to that placed on the petroleum industry.

Post-injection

There are three options for post-injection monitoring prior to site closure:

- undertaken by the operator as part of the obligations under their injection licence;
- undertaken by the regulator using funds provided by the operator for this specific purpose;
- undertaken by the regulator using public funds.

Funding for post-injection monitoring can properly be considered part of the business of greenhouse gas transport injection and storage and government funding could be seen as direct support for the activity. If government support for a project is to be considered it should be through direct funding as this provides much better transparency and certainty. This approach would also raise issues relating to liability.

Similarly, even if funds were provided by the operator to enable the Government to undertake the decommissioning and post-injection monitoring, the Government could still face the situation where it could not be certain if the available funds would be sufficient to meet all costs. This could occur, for example, if the behaviour of the injected substance was not behaving as expected and required additional monitoring or remediation and mitigation. Issues relating to liability are the same as in the previous option.

Requiring the operator to undertake the post-injection monitoring provides a clear and transparent system for managing issues such as liability. Risks would be assumed by industry in a way analogous to any other industrial process. Moreover, the operator will have both the experience and knowledge to undertake activities in the most cost effective manner.

If post-injection monitoring is undertaken by the operator as part of their obligations, the licensee will have to conduct extensive monitoring and verification of the behaviour of the injected greenhouse gas substance, in order that reliable predictions can be made as to its potential migration and interaction with the surrounding geological structures. During this period, the licensee may be required to undertake precautionary or remedial work to prevent or mitigate harmful effects on the geotechnical integrity of the storage site. This will include any necessary measures to avoid damage to natural resources. The objective during this phase will be for the licensee to satisfy the regulator that all reasonable possibilities have been provided for.

The purpose of this work is to enable the regulator to compare predictions of the behaviour of the greenhouse gas substance with actual results, in order to inform future regulatory practice and to ensure that no unforeseen events take place. A site closing certificate would not be issued until a high degree of certainty had been attained.

Once the regulator is satisfied, the title holder may apply for closure, which would result in the surrender of the title.

Post-closure

The three options for post-injection monitoring prior to site closure discussed above also apply to the post-closure phase, but noting that arrangements would have to take into account that statutory obligations would have ceased (see also section 3.8 on long term liability, below).

Under this option (effectively option 2 above, undertaken by the regulator using funds provided by the operator), the licensee would also be required to make financial provision for a program of post-closure monitoring and verification.

No substantive consultations have taken place in relation to the proposed closure process to date, but it will be one of the matters for consideration by stakeholders once an exposure draft of the legislation is released.

Conclusions

The advantages and disadvantages of the options are:

	Potential disadvantages	Potential advantages
Post-injection/pre-closure		
Undertaken by operator as part of their obligations under their injection licence	Period to closure uncertain	Clear and transparent means of addressing liability Risks managed in a similar way to other industries Makes use of operator experience and expertise
Undertaken by the regulator using funds provided by the operator	Liability issues less clear Potential lack of expertise by the regulator Funds may not be sufficient to cover costs	Certainty as to timing for end of statutory obligations Provides an incentive for greenhouse gas operations by reducing uncertainty about future liabilities
Undertaken by the regulator using public funds	Liability issues clear Potential lack of expertise by the regulator Funds may not be sufficient to cover costs Provides government support for project through an non-transparent mechanism	Certainty as to timing for end of statutory obligations Provides an incentive for greenhouse gas operations by reducing uncertainty about future liabilities
Post-Closure		
Undertaken by operator as part of statutory obligations	Cumbersome additional access tenure would be required Does not provide for changes in company circumstances	Clear and transparent means of addressing liability Makes use of operator experience and expertise

Undertaken by the regulator using funds provided by the operator	<p>Potential lack of expertise by the regulator</p> <p>Funds may not be sufficient to cover costs</p>	<p>Certainty as to timing for end of statutory obligations</p> <p>Allows monitoring to continue independent of company circumstances</p> <p>Provides an incentive for greenhouse gas operations by reducing uncertainty about future liabilities</p>
Undertaken by the regulator using public funds	<p>Liability issues clear</p> <p>Potential lack of expertise by the regulator</p> <p>Funds may not be sufficient to cover costs</p> <p>Provides an effective government subsidy through non-transparent mechanisms</p>	<p>Certainty as to timing for end of statutory obligations</p> <p>Allows monitoring to continue independent of company circumstances</p> <p>Provides an incentive for greenhouse gas operations by reducing uncertainty about future liabilities</p>

Recommendation

That post-injection/pre-closure monitoring be undertaken by the operator as part of their obligations under the site closing process, with the operator being required to make financial provision for post-closure long term monitoring after they have vacated the site.

3.7. Transport

Pipelines transporting greenhouse gases will be an integral part of any offshore greenhouse gas injection and storage project. The risks associated with these pipelines will be very similar to those for petroleum pipelines.

The 2005 RIS concluded that gaps in the existing regulatory system be addressed and that amendments/additions to regulatory frameworks for pipelines be extended to explicitly cover pipelines transporting greenhouse gases.

For Commonwealth offshore waters, the OPA and its regulations require only minor amendment to be applicable to the transport of greenhouse gases. These amendments would consist of extending the existing system to apply to greenhouse gas pipelines as well as petroleum pipelines. If this approach is used, then administration would essentially be identical to that of offshore petroleum pipelines.

No other regulation exists in Commonwealth offshore areas for pipelines.

Approaches other than use of the Offshore Petroleum Act would have to duplicate this existing framework if community expectations on issues such as occupational health and safety and the environment are to be met. Such duplication would lead to higher costs through the need to develop new administrative systems.

No substantive comments have been received from stakeholders on this proposed approach.

Conclusions

No existing regulatory framework other than the OPA exists for regulating offshore greenhouse gas pipelines.

Recommendation

That the existing pipeline regime under the OPA be adopted by extending it to apply to greenhouse gas pipelines.

3.8. Long Term Liability

Up until the period to site closure the proposed regulatory system would establish comprehensive statutory responsibilities of title holders with respect to the protection of the environment, other seabed resources and human health and safety in exactly as the same way as for petroleum.

Given the potential timeframes associated with the storage of the greenhouse gas substance as well as the longevity of commercial enterprises, the question of how any long term liabilities would be met arises.

Many commentators and stakeholders have raised the question of liability for the period after site closure. Suggestions have ranged from government assumption of all longer term liabilities to having all liabilities rest with industry in perpetuity. Other suggestions have been for some form of shared responsibility.

The 2005 RIS concluded that that liability should be based on existing regulatory arrangements and common law.

After site closing, there are four options for long term liability:

- no new regulation;
- new regulation under which Government explicitly assumes long term liability;
- new regulation where industry is required to assume long term liability;

- new regulation to share long term liability between government and industry.

No new regulation would involve relying on common law for long term liability. Under this option, greenhouse gas title holders would not be immunised from common law liability to persons who suffer injury or loss as a result of their actions. Nor would their liability be limited. This non-intervention would extend to all forms of common law liability, including long term liability. The Government would therefore not 'take over' long term liability from project participants. Nor would the Government provide any indemnity to project participants in respect of any liability they might incur.

In the long term, the risk would, in a sense, pass to the community because project participants may cease to exist or because of some other time related factor such as availability of witnesses. For example if GHG operations were to result in personal injury or loss to individuals, at a time when there were no project participants still available to be sued, or where damages were for some other reason irrecoverable, the cost would in practice be borne by the community. This would, however, be the consequence of the passage of time, not of any assumption of liability on the part of government. Greenhouse gas industry participants would therefore need to make their own arrangements to deal with potential common law liability, as an ordinary cost of doing business, as must members of any other industry.

Under existing arrangements relating to petroleum, the OPA does not exclude, limit or allocate common law liability of title-holders or others engaged in offshore petroleum operations. Common law liability lies where it falls.

If Government were to explicitly assume long term liability this would effectively be a subsidy. Any subsidies would better be delivered directly rather than through this indirect mechanism which lacks transparency and puts the Government in the position of accepting potential liabilities whose size is highly uncertain. This approach could also establish precedents for government policy in other areas.

New regulation to require industry to assume liability could only realistically involve the establishment of some sort of fund to meet liabilities. No other options are practical given the long term nature of potential liabilities (in the order of thousands of years) and the potential life of industrial participants. This would have the effect of posing additional costs on industry compared with existing law. There would also be a major issue in determining the quantum for contributions to any such fund.

A system could be developed through which industry and government shared long term liability. However, mechanisms for this are unclear and would require significant new law and could set precedents for policy in other areas. In any event, the 'no new regulation' option effectively provides a system where liabilities would be shared between industry and the community, with Government effectively assuming a greater share of liability due to the passage of time.

While many comments have been made on this issue, no consultations have taken place with stakeholders in relation to the proposed approach to date, but it will be one of the matters for consideration by stakeholders once an exposure draft of the legislation is released.

Conclusions

The advantages and disadvantages of the options are:

	Potential Disadvantages	Potential Advantages
No new regulation	<p>Lack of precedents in this industry means that the outcome of common law application remains to be tested</p> <p>Perception that long term liability has not been addressed</p> <p>Potential disincentive to investors</p>	<p>Makes use of existing frameworks</p> <p>Provides incentive to industry to take practical actions to minimise exposure</p> <p>Provides a mechanism by which liabilities would be shared over time</p> <p>Does not set new precedents for government policy</p>
New regulation under which Government explicitly assumes long term liability	<p>Government exposure to future costs unclear</p> <p>Incentive provided in a non-transparent manner</p> <p>Could set precedents for government policy in other areas</p> <p>Incentive for industry to take practical actions to minimise exposure unclear</p>	<p>Provides an incentive to project investors</p>

New regulation where industry is required to assume long term liability	<p>Could impose higher costs than necessary on industry through the need to contribute to a fund which would be held in perpetuity</p> <p>Issue of determining appropriate level of contribution to a fund</p>	Incentive for industry to take practical actions to minimise exposure
New regulation to share long term liability between government and industry	Unclear as to how liabilities could be shared	May provide an incentive to industry to take practical actions to minimise exposure

Recommendation

That there be no new regulation and the issue of long term liability be left to common law in the same way as it does for petroleum and other industries.

3.9. Bonds and Guarantees

Experience with the mining industry, both in Australia and internationally, has demonstrated that there is a significant risk that commitments to undertake certain works, especially decommissioning and site rehabilitation may not be undertaken. This can arise when, for example, a company ceases operations and has no remaining resources to fund the necessary work. Such risks can be faced during any phase of a project. For example, exploration activities may result in the need for rehabilitation activities. Risks may also be posed during operation as a result of earlier than planned termination, as well as at the end of planned project life.

As a result, it is common practice in the Australian on-shore mining and petroleum industries to require financial bonds or guarantees for site rehabilitation. Such bonds and guarantees are also normal practice internationally. These bonds or guarantees are usually required from the commencement of the project and the amount reviewed during the project to take account of any changes that occur. Bonds and guarantees have not been required of the Australian offshore petroleum industry because of the nature of the industry involved (large companies with the resources to undertake any decommissioning and site rehabilitation required and their need to maintain their social licence to operate). This situation, however, is kept under review and may change in the future if industry structure changes to pose significant risks that such activities will not be undertaken adequately.

In assessing the need for securities there is a need to take into account that this is a new industry where there is a relatively high degree of uncertainty about risks and an array of potential company ownership, structures and sizes involved. Thus it is prudent to provide for the possibility of bonds and guarantees to ensure that funding

is available for key activities. To avoid the situation of always requiring bonds or guarantees, it is preferable that the need be assessed by the regulator on a case-by-case basis. This will minimise overall costs.

A mandatory requirement for bonds and guarantees inevitably results in a 'lowest common denominator' approach with all companies being required to enter into arrangements, irrespective of the need in their specific case. Leaving it to the regulator's discretion reduces the number of bonds and guarantees that will be sort, thus lowering overall compliance costs.

On the other hand, the ability to be able to decide the level, if any, of a security required on a case-by-case basis may lead to perceptions of bias. Clear guidelines on security assessment criteria will need to be developed to ensure transparency.

No substantive comments have been received from stakeholders on this proposed approach.

For long term monitoring after site closure, it is likely that a bond or guarantee would be required in nearly all circumstances. This reflects the long term nature of such monitoring and the need maintain certainty as to migration and potential impacts.

No substantive comments have been received from stakeholders on the issue of bonds and guarantees.

Recommendation

That regulatory provision be made for bonds and guarantees to be requested at the discretion of the regulator.

3.10. Interactions with Petroleum

Effectively all of Australia's offshore areas that may be attractive for greenhouse gas injection and storage are the subject of existing petroleum titles. Over time, some of these will be relinquished and become vacant. The greenhouse gas transport, injection and storage industry will need to be able to access areas which overlap petroleum titles. Without this overlap no significant areas would be available for greenhouse gas injection and storage. In most cases, petroleum and greenhouse gas activities will be able to co-exist. It is possible, however for greenhouse gas activities to impact negatively on petroleum operations. This could occur, for example, through migration of the greenhouse gas into a petroleum pool and displacing the petroleum, making it effectively unrecoverable and/or leading to materials incompatibility problems with existing petroleum production equipment. Similarly future petroleum operations could impact negatively on an established greenhouse gas operation. Thus a system is required to manage circumstances where the activities could impact negatively on one another. Without such a system both industries would face greater uncertainty to access rights which would be counter to the guiding principles.

There are potential advantages for both the greenhouse gas and petroleum industry in working in the same area. For example, information gained by one activity may have significant commercial value for the other.

The issue of interactions with petroleum was not addressed in the 2005 RIS.

Pre-commencement petroleum titles

It is a policy imperative that the rights of pre-commencement petroleum title holders (that is those titles that are in force before the greenhouse gas regulatory framework is put in place) are preserved. Impinging on these rights would create increased sovereign risk with the likely result of reduced petroleum activities in Australian waters.

Options to avoid adverse impacts on pre-commencement titles include:

- avoiding areas covered by pre-commencement petroleum titles;
- allowing greenhouse gas operations to proceed only with the agreement of the petroleum title holder;
- requiring greenhouse gas proponents to demonstrate that they will have no significant impact on petroleum operations.

As already discussed, avoiding areas covered by pre-commencement titles effectively means that no areas would be available for greenhouse operations. A system of overlapping titles is therefore necessary.

However, the options of no significant adverse impact and commercial agreements can be combined. Under this option, greenhouse gas operations could proceed when there was a commercial agreement between the two industry title holders. In the absence of such an agreement, greenhouse gas operations could only proceed if the greenhouse gas proponent could demonstrate that there would be no significant adverse impact on the pre-commencement petroleum title holder's rights.

In the event that a greenhouse gas proponent is unable to reach a commercial agreement with a petroleum title holder, they will face significant risks in their ability to operate. Prospective greenhouse gas title holders, however, will be in a position to evaluate these risks before making any investment decisions.

This framework was proposed in the 2006 document *Implementing an Australian Regulatory Framework for Carbon Capture and Storage* and drew a variety of comment from stakeholders. The petroleum industry expressed concern that it might not do enough to protect their existing rights, while some greenhouse gas proponents perceived it as giving the petroleum industry a 'veto' power over their operations. Both groups noted that they needed more detail on how this framework would be implemented.

This issue is expected to attract significant feedback when the exposure draft is released for stakeholder comment and is closely related to the issue of managing release and award of exploration areas discussed in Section 3.2 above.

Recommendation

That, in the absence of an agreement between the parties, the rights of pre-commencement petroleum title holders be protected by requiring greenhouse transport, injection and storage operators demonstrate to the satisfaction of the regulator that their activities will not have a significant negative impact on petroleum operations.

Post-commencement titles

For post-commencement titles the imperative to protect existing rights is no longer an issue. Nevertheless, it is important to ensure that the system developed is not perceived by the petroleum industry as putting major obstacles in the way of future offshore petroleum operations. Such a perception would make it more difficult for Australia to attract the highly mobile petroleum exploration budget of major petroleum companies, with significant implications for future discoveries of petroleum.

Options available include:

- giving one industry (either petroleum or greenhouse gas) precedence over the other;
- giving precedence to whichever industry was first granted a title in the area in question;
- allowing a decision to be made by the government as to which industry should proceed based on the specific circumstances of the case in situations where both industries cannot co-exist;

Giving precedence to one industry (the ‘preferred industry’ option) over the other (that is, petroleum always preferred or greenhouse gas always preferred) raises the risk that major opportunities in one industry will be foregone in return for a lesser opportunity in the other. In addition, it would increase the perceived sovereign risk for whichever industry was not favoured. Against this, the other industry would have greater investment certainty. This approach also has the disadvantage that it does not allow for flexibility if the relative importance of petroleum and greenhouse gas operations change.

Giving whichever industry was first awarded a title (the ‘first-in-first-served’ option) also raises the risk that major opportunities in one industry will be foregone in return for a lesser opportunity in the other. This approach also has the disadvantage that it does not allow for flexibility if the relative importance of petroleum and greenhouse

gas operations change. It does, however, have the advantage that it increases certainty for the first industry established.

Allowing the regulator to make decisions on which industry should proceed in cases where they cannot co-exist allows the relative merits of the two competing opportunities to be taken into account (the ‘public interest’ model). It also allows for flexibility if the relative importance of petroleum and greenhouse gas operations change. It also enables commercial agreements between the parties to be taken into account, which could lead to acceptable compromise solutions. This could be done through a public interest test¹ in which the regulator would consider the relative merits of the two competing proposals. Criteria could include social, economic and environmental factors.

However, to provide confidence to investors it would be necessary to limit this test to titles earlier in the series than production licences or injection licences, after which point title holders could be making large investments. Thus, once an injection licence or production licence has been granted, the other industry would have to demonstrate no significant adverse impact, in the same manner as is done for pre-commencement petroleum titles.

Management of this system will require that certain post-commencement petroleum titles (that is those that overlap a greenhouse gas title) are identified and operators are required to inform the regulator of proposed activities so that the regulator can then inform the greenhouse gas title holder and ensure that activities can co-exist. Greenhouse title holders (except for holders of injection licences) will have to be placed under a similar obligation.

The difference between these options in terms of administrative requirements is negligible. In a ‘preferred industry’ or ‘first-in-first-served’ option the reduced compliance costs on the first industry in will be counterbalanced by increased compliance costs for the second.

The framework proposed in the 2006 document *Implementing an Australian Regulatory Framework for Carbon Capture and Storage* contained the public interest test option. Only limited feedback on this aspect was provided by stakeholders, although one informal comment was that the increased certainty offered by the first-in-first-served model could outweigh the flexibility offered by the public interest model.

Further feedback is expected when the exposure draft is released for stakeholder comment.

Conclusion

The advantages and disadvantages of the options are:

¹ As noted in Section 1, the guidelines for such a test are yet to be decided, and will be considered further following public consultation.

	Potential disadvantages	Potential advantages
Preferred industry option	<p>Reduced certainty for the non-preferred industry</p> <p>No ability to decide which industry represents the most important opportunity</p> <p>Limited basis for commercial agreements between industries</p>	<p>Increased certainty for the preferred industry</p>
First-in-first-served option	<p>Reduced certainty for the second industry to enter the area</p> <p>No ability to decide which industry represents the most important opportunity</p> <p>Limited basis for commercial agreements between industries</p>	<p>Increased certainty for the second industry to enter the area</p>
Public interest model	<p>Reduced certainty for industry</p>	<p>Increased flexibility to allow the most 'valuable' development opportunity to proceed</p> <p>Provides a basis for commercial negotiations between industries</p>

Recommendation

That, in the event that activities cannot co-exist, post-commencement petroleum titles and greenhouse gas titles be prioritised using a public interest test.

3.11. Other Users of the Sea

Other users of the sea include fisheries, marine transport, communications and defence. Greenhouse gas activities have the potential to impact on the users through environmental impacts affecting fisheries and through the physical presence of structures (for example impacts on fishing trawling, the hazard to navigation represented by fixed structures, and access to defence practice areas. All these potential impacts are essentially identical to those posed by petroleum operations. The OPA protects these rights by requiring other users to be taken into account in the process and demonstrating that impacts have been minimised to the extent practical. In practice, the first stage in managing potential impacts is through stakeholder

consultation when deciding on areas to be released for exploration (see Section 3.2). This process may lead to special conditions being applied to the area in question.

An identical approach is proposed for the greenhouse gas transport, injection and storage industry which will have almost identical impacts on other users of the ocean.

No consultations have taken place in relation to the proposed approach to date, but it will be one of the matters for consideration by stakeholders once an exposure draft of the legislation is released.

Recommendation

That the rights of other users of the sea be managed in the same way as for the petroleum industry.

3.12. The Regulator

Given that there will be a large number of areas in the regulatory framework which will require decisions or approvals by a regulator (sections 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.9, 3.10 and 3.11 above, the question arises of who should be responsible for these tasks.

This issue was not addressed in the 2005 RIS or the 2006 discussion paper.

There are two basic options:

- the existing Joint Authority/Designated Authority (JA/DA) model used for petroleum, whereby day-to-day decisions are delegated to the States/Territories;
- administration by the Australian Government (that is the responsible Commonwealth Minister).

Administration through the JA/DA model has the advantages

- use of existing administration systems;
- close involvement with the day-to-day administration of petroleum could provide synergies for managing greenhouse gas activities;
- ensuring close involvement with the States/Territories on projects that are likely to be relevant to their interests.

Administration by the Australian Government is feasible because of the small number of potential projects and also provides a number of advantages.

- it will provide greater national consistency, which will be particularly important given that this will be a new industry and many regulatory approvals in the early stages of the scheme will be setting precedents for future decisions;
- not all jurisdictions have the expertise or want the responsibility for managing greenhouse gas operations;
- given that projects will be in offshore waters under Commonwealth legislation, delegation of decision making powers to the States/Territories could lead to additional complexity if the issues arise relating to long term liability.

Because many of the day-to-day regulatory matters are essentially identical to those in the petroleum industry, there is an opportunity to under the central administration model for States/Territories to be contracted to undertake these regulatory activities on behalf of the Australian Government. This will address any issues that might arise from the need to develop new expertise in the Australian Government which could duplicate existing State/Territory expertise.

Close involvement with the States/Territories on major projects can be addressed through existing consultative processes, including the Ministerial Council on Minerals and Petroleum Resources and its sub-committees.

An element of greenhouse gas activities more suited to the JA/DA regulation model relates to pipelines. This approach would be well suited because all known potential greenhouse gas pipelines associated with offshore storage projects will traverse areas of State/Territory jurisdiction as well as Commonwealth waters. Leaving pipeline administration under current arrangements will provide for better coordination of decision making than applying the Australian Government model.

Occupational health and safety is another area that is more suited to using the existing regulator, that is, the National Offshore Petroleum Safety Authority (see Section 3.4).

The proposal has been discussed with States and Territories. Some are supportive, while others have expressed some reservations. Wider consultation on this proposal will take place when the exposure draft of the legislation is released for comment.

Conclusion

The advantages and disadvantages of the options are:

	Potential disadvantages	Potential advantages
JA/DA Model	<p>Potential to reduce national consistency, especially in relation to ‘first time’ decisions which will set precedents for future decisions</p> <p>Not all jurisdictions have the expertise or want the responsibility for managing greenhouse gas operations</p> <p>Potential for greater complexity if issues arise relating to long term liability</p>	<p>Use of existing administration systems</p> <p>Close involvement with the day-to-day administration of petroleum could provide synergies for managing greenhouse gas activities</p> <p>Ensures close involvement with the States/Territories on projects that are likely to be relevant to their interests</p>
Administration by the Australian Government	<p>Does not provide the synergies that might arise from the close involvement with the day-to-day administration of petroleum industry</p> <p>May reduce involvement with the States/Territories on projects that are likely to be relevant to their interests</p>	<p>Potential to increase national consistency, especially in relation to ‘first time’ decisions which will set precedents for future decisions</p> <p>Overcomes the issue of not all jurisdictions having the expertise or wanting the responsibility for managing greenhouse gas operations;</p> <p>Simpler if issues arise relating to long term liability;</p>

Overall, the advantages of Australian Government administration are considered to outweigh those of the JA/DA approach. It will however, require processes to be put in place for liaison with States/Territories.

Recommendation

That regulation of greenhouse gas injection and storage activities in Commonwealth waters be undertaken by the responsible Commonwealth Minister, with the exceptions of pipelines, which would be administered under the existing JA/DA model and occupational health and safety which would be administered by NOPSA.

4. COMPLIANCE COSTS

The operator of a greenhouse gas sequestration title will face many compliance costs analogous to the operation of offshore petroleum titles. Lodgement of documents, compilation of plans, requests for permission and record keeping are expected to be broadly consistent with that under the OPA. In the absence of detail on regulation and guidelines, it is impossible to quantify such costs at this stage with traditional tools such as the OPBR Business Cost Calculator.

While the costs of compliance under the Offshore Petroleum Act have not been quantified, the recent revisions to this regulatory framework – which have been adopted in the geosequestration provisions – were intended to lower the costs of compliance from the *Petroleum (Submerged Lands) Act 1967*. Similarly, moves toward objective based regulation for petroleum were intended to allow industry to seek least cost solutions to compliance. This approach is central to the site management plan in the geosequestration amendments, and is proposed to be retained under future regulations and amendments appropriate to geosequestration.

Many of the requirements of the regulator are costly but not *additional* to work which would be carried out by titleholders as a routine part of designing and executing and managing an offshore geosequestration operation. For example, highly detailed modelling of the subsurface behaviour which is essential for a site plan, should also be a regular part of the work which would be done by the company for its own commercial purposes. As long as administration is directed towards minimal duplication and consistency of requirements, as is done in offshore petroleum, there should be no undue burden to preparing submissions for the regulator.

An important aspect of reducing compliance costs will be to establish the guidelines which give detail, particularly on procedural matters, and to establish experience in both industry and the Commonwealth Government in administering this industry. Given the infancy of the geosequestration industry, and the lack of international models, in some areas (eg. the application of a public interest test), the proposed legislation gives wide ranging powers to the Responsible Commonwealth Minister rather than prescribes complex decision making rules. If this balance is not correct, there is a risk that the potential cost of compliance will be a disincentive to investment in geosequestration. As this is difficult to determine *a priori*, this issue will need to be reassessed prior to titles being awarded.

However, despite the initial uncertainty which will accompany any new regulatory regime, there is an expectation that the choice of a single regulator will lower the cost of compliance in the long term. At present, offshore petroleum titles may pass through complex and repetitive assessments between State/NT and Australian Governments, and industry has been critical of delays and differences in interpretation between jurisdictions. The establishment of the Australian Government as the sole regulator is expected to shorten approval timeframes and costs and minimise the opportunities for disputes.

Compliance costs in relation to managing interactions with the petroleum industry should also be modest as analysis of possible impacts will naturally arise out of the detailed analysis of the suitability of potential sites. The main impact in this context relates to industry certainty. This issue, however, will be known by potential investors from the outset and can be taken into account in their decision making process.

There may also be some compliance costs for holders of post-commencement petroleum titles. However this is likely to affect a very small number of petroleum title holders and again the compliance costs should be limited.

5. REVIEW

The Government's proposed regulatory model will be reviewed by the Responsible Commonwealth Minister in the light of feedback collected by the Department of Resources, Energy and Tourism on the exposure draft of the legislation.

If the proposed legislation moves into law, it is expected to be required indefinitely so will not be subject to a sunset clause. Review is expected to continue on an ad hoc basis and also to be subject to the Government's general policy of five yearly reviews, as in the case of current petroleum legislation. The MCMPR has formally committed to a review of its guiding principles by 2010, which will be used to assess issues associated with the implementation of the offshore legislation.

The Department of Resources, Energy and Tourism will establish a single point of contact for any inquiries or feedback related to the operation of the regulation. This will include a web presence and regular e-mail newsletter to interested parties encouraging feedback on general and specific issues.

Regular reports will also be made to State and Commonwealth officials under the MCMPR on issues associated with the amendments.

6. CONCLUSIONS

In application of the 2005 Regulatory Principles to Commonwealth Waters, it is proposed that:

- That the regulatory framework for greenhouse gas transport, injection and storage be implemented by amending the *Offshore Petroleum Act 2006* and its attendant regulations to deal with the many aspects of a greenhouse storage project would have in common with petroleum industry operations.
- That the release and award of areas for exploration for greenhouse gas storage sites use a competitive process similar to that used for petroleum.
- That management of environmental impacts (excluding issues relating to the safe and secure storage of the greenhouse gases substance) be done using the existing framework applied to petroleum activities.

- That management of occupational health and safety issues be done using the existing framework and institutions applied to petroleum activities.
- That a greenhouse gas injection licence not be granted until a project specific site plan is approved by the regulator. The plan should contain detailed modelling of the expected behaviour of the greenhouse gas substance after injection, including the expected migration path or paths.
- That the site plan contain a comprehensive monitoring and verification program to be implemented by the licensee throughout the injection phase and post-injection phase of the project, to ensure that the injected greenhouse gas substance is behaving as predicted or, if it is not, to identify any risks to the environment, safety or other resources.
- That the site plan specify the safeguard measures that will be implemented to ensure that the injected greenhouse gas substance does not deviate from the expected migration path(s) and does not escape into the atmosphere. This needs to be supported by regulatory powers to direct outcomes in the event that a serious situation occurs.
- That detailed regulations on reporting requirements be developed, having regard to need of the community to understand fully the fate of the greenhouse gas substance and any requirements that might be imposed through a carbon trading scheme and international reporting obligations.
- That the existing pipeline regime under the OPA be adopted by extending it to apply to greenhouse gas pipelines.
- That post-injection/pre-closure monitoring be undertaken by the operator as part of their obligations under the site closing process, with the operator being required to make financial provision for post-closure long term monitoring after they have vacated the site.
- That there be no new regulation and the issue of long term liability be left to common law in the same way as it does for petroleum and other industries.
- That regulatory provision be made for bonds and guarantees to be requested at the discretion of the regulator.
- That, in the absence of an agreement between the parties, the rights of pre-commencement petroleum title holders be protected by requiring greenhouse transport, injection and storage operators demonstrate to the satisfaction of the regulator that their activities will not have a significant negative impact on petroleum operations.

- That, in the event that activities cannot co-exist, post-commencement petroleum titles and greenhouse gas titles be prioritised using a public interest test.
- That the rights of other users of the sea be managed in the same way as for the petroleum industry.
- That regulation of greenhouse gas injection and storage activities in Commonwealth waters be undertaken by the responsible Commonwealth Minister, with the exceptions of pipelines which would be administered under the existing JA/DA model and occupational health and safety which would be administered by NOPSA.

These policy decisions have been translated into draft legislation for further stakeholder comment.

The proposed legislative framework involves the extension of existing petroleum regulations under the OPA to apply to greenhouse gas activities, and new regulations to cover those aspects of greenhouse gas transport, injection and storage activities where existing petroleum regulation is not appropriate. However, the overall framework establishes the broad direction and structure of many of these regulations.

Next Steps

The next stage in the process is to release the Bill as an exposure draft for comments from stakeholders to obtain more detailed feedback on the framework. Following consideration of comments from stakeholders it is envisaged that the Bill will be amended, if necessary, and introduced into Parliament.

Regulations and guidelines to cover things such as public interest tests, impact significance tests, assessments and approvals, monitoring and verification, financial issues and post-closure responsibility remain to be developed. While those used for regulating the offshore petroleum industry provide a useful starting point for many of these instruments, it appeared inappropriate to pursue this level of detail without first soliciting clearer feedback from stakeholders on the proposed legislative amendments. As a consequence, many issues relating to the final cost of regulation also cannot be assessed at this stage.

The final stage in the process will be the development of the associated regulations and guidelines. The development of these regulations and guidelines will require further consultation with relevant stakeholders. A further RIS will be undertaken on the regulations and guidelines, at which stage a clearer picture of costs and benefits will be provided.