

Gladstone Liquefied Natural Gas Project:

Coordinator-General's change report no. 6— Gas field disturbance

21 March 2018

Amended August 2019

The Department of State Development, Manufacturing, Infrastructure and Planning

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Contents

1.	Introduction.....	1
1.1.	The proponent.....	1
1.2.	The project.....	1
1.3.	Prior applications for project change.....	1
2.	Change report assessment process.....	1
2.1.	Application.....	1
2.2.	The proposed change.....	1
2.3.	Proponent's reasons for change.....	2
2.4.	Public notification.....	2
2.5.	Further information.....	2
3.	Evaluation of the change request.....	2
3.1.	Change request 1 – clearing of plants protected under the Nature Conservation Act 1992.....	3
3.2.	Change request 2 – disturbance limits for sensitive regional ecosystems, essential habitat, protected plant species and protected fauna species.....	4
4.	Conclusion.....	7
Appendix 1.	Amended conditions.....	8

1. Introduction

1.1. The proponent

The proponent for the Gladstone Liquefied Natural Gas (GLNG) project is an unincorporated joint venture between Santos (30 percent), Petroliaam Nasional Berhad (PETRONAS), Total and Korean Gas Corporation (KOGAS). For the purposes of this change report, the designated proponent is Santos GLNG.

1.2. The project

The *Gladstone Liquefied Natural Gas (GLNG) Project – Coordinator-General's evaluation report for an environmental impact statement* (Coordinator-General's evaluation report) was released in May 2010, pursuant to section 35 of the *State Development and Public Works Organisation Act 1971* (SDPWO Act). The GLNG project comprises a natural gas liquefaction and export facility, coal seam gas fields and a gas transmission line.

The Coordinator-General's report authorised gas field activities based on production of approximately 5,300 petajoules (PJ) (140 billion m³) sufficient to provide gas for the first LNG production train. This includes the development of approximately 2,650 exploration and production wells.

1.3. Prior applications for project change

Since 2010, Santos GLNG have had five change reports being:

- GLNG Change Report No. 1 – Local Industry Participation Plan
- GLNG Change Report No. 2 – Increase in pipe transport
- GLNG Change Report No. 3 – Audit
- GLNG Change Report No. 4 – Third Train
- GLNG Change Report No. 5 – Social.

2. Change report assessment process

2.1. Application

On 16 September 2016, the proponent applied to the Coordinator-General to evaluate a proposed change to the GLNG project's imposed conditions, under Division 3A, section 35C of the SDPWO Act.

2.2. The proposed change

The proponent applied to the Coordinator-General seeking changes to the Coordinator-General's evaluation report, specifically imposed Condition 13 and imposed Condition 16 of

Appendix 2—Gas Fields, Part 2 – Coordinator-General’s environmental conditions—gas fields: General Conditions for the gas fields.

The proponent is seeking to remove the requirements of imposed Condition 13 of Appendix 2—Gas Fields, Part 2 – Coordinator-General’s environmental conditions—gas fields: General Conditions for the gas fields, as it duplicates other regulatory instruments and approval mechanisms under the:

- *Nature Conservation Act 1992* (NC Act)
 - Nature Conservation (Wildlife Management) Regulation 2006 (NC Reg)
 - clearing permits (issued pursuant to the NC Act)
- the Santos GLNG Upstream Significant Species Management Plan, approved pursuant to the *Environment Protection and Biodiversity Conservation Act 1999*.

The proponent is seeking to remove the requirements of imposed Condition 16 of Appendix 2—Gas Fields, Part 2 – Coordinator-General’s environmental conditions—gas fields: General Conditions for the gas fields, as it duplicates other regulatory instruments and approval mechanisms under the:

- *Environmental Protection Act 1994* (EP Act)
 - environmental authorities (issued pursuant to the EP Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
 - the Santos GLNG Upstream Significant Species Management Plan, approved pursuant to the EPBC Act.

2.3. Proponent’s reasons for change

The change application seeks to remove imposed conditions that are either inconsistent with, or duplicate provisions of the current environmental legislation and associated approvals.

2.4. Public notification

On 18 October 2016, the Coordinator-General decided pursuant to section 35G (1) of the SDPWO Act, that the proponent was not required to publicly notify the proposed change.

2.5. Further information

On 30 November 2016, a request for additional information was made and the proponent responded on 17 May 2017.

3. Evaluation of the change request

In evaluating this application for project change, the Coordinator-General has considered the following:

- the proponent’s application for project change, dated 16 September 2016
- the additional information supplied by the proponent on 17 May 2017

- the Coordinator-General’s evaluation report for the Santos GLNG project issued on 28 May 2010
- the EPBC Act approval 2008/4059 and the variation issued on 15 April 2016
- environmental authority (EA) conditions for the project
- Santos GLNG Upstream Significant Species Management Plan approved pursuant to the EPBC Act
- advisory agency representations.

3.1. Change request 1 – clearing of plants protected under the *Nature Conservation Act 1992*

The Coordinator-General’s evaluation report on the GLNG project imposed Condition 13, Appendix 2—Gas Fields, Part 2 – Coordinator-General’s environmental conditions—gas fields to regulate the clearing of native plants protected under the *Nature Conservation Act 1992*.

3.1.1. Assessment of change request

The GLNG project is subject to the protected plants provisions under section 89 of the NC Act and Chapter 4 of the NC Regulation, which includes the requirement to obtain clearing permits as well as the subsequent rehabilitation, offsetting and reporting as required by the conditions of any relevant permit under the NC Act.

The requirements of condition 13(a), (b), (c), (e) and (f) are regulated by the NC Act and existing permits held by the proponent. This includes the existing approved clearing permits and Santos GLNG Upstream Significant Species Management Plan approved by the Commonwealth Minister for Environment.

The Nature Conservation (Administration) Regulation 2006 was amended in 2014 to adopt a risk-based and streamlined approach to the protected plants legislative framework in Queensland. The requirement to protect ‘Type A’ plant species identified in (d) of Condition 13 was removed. The term ‘Type A’ was replaced by ‘Special Least Concern’ under the NC Reg and these plants are now described as ‘commercially valuable species’ listed in Schedule 3A of the regulation. The legislation also removes the requirement of (g).

Condition 13 was imposed by the Coordinator-General under section 54B of the SDPWO Act as there was no efficient and consolidated approval framework for protected plants at the time. A streamlined protected plants management framework which achieves the object of these conditions was introduced in 2014. As such, the matter is now managed pursuant to other regulatory requirements and is no longer appropriate that it be addressed by the Coordinator-General.

The removal of Condition 13(a) – (g), Appendix 2—Gas Fields, Part 2 – Coordinator-General’s environmental conditions—gas fields, is supported by the Queensland Department of Environment and Science (DES). Advice from the Wildlife Management Unit on 16 November 2016 stated that under the protected plants legislative framework, the removal of plants would be consistent with the updated legislative framework.

3.2. Change request 2 – disturbance limits for sensitive regional ecosystems, essential habitat, protected plant species and protected fauna species

Imposed Condition 16, Appendix 2—Gas Fields, Part 2 – Coordinator-General’s environmental conditions—gas fields of the Coordinator-General’s evaluation report impose maximum disturbance limits to any disturbances authorised for the gas field activities environmental authority under the *Environmental Protection Act 1994* and any other relevant legislation.

3.2.1. Assessment of change request

Sensitive Regional Ecosystem Disturbance Limit

The Santos GLNG EPBC Act approval (2008/4059) issued on 22 October 2010 and varied on 15 April 2016, lists disturbance limits to certain matters in Condition 25, Table 2. The condition applies to authorised unavoidable adverse impacts on matters of national environmental significance (MNES).

The EPBC approval limits the clearing of Threatened Ecological Communities (TECs), namely:

- Brigalow (*Acacia harpophylla* dominant and co-dominant) ecological community (the Brigalow TEC)
- Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions (the SEVT TEC).

Three of the Regional Ecosystems (REs) in the ‘sensitive regional ecosystems disturbance limit’ table in the Coordinator-General’s evaluation report are components of the listed TECs in the EPBC approval as follows:

- REs 11.4.3 and 11.9.5 are components of the Brigalow TEC, for which clearing limits are imposed by condition 25 of the EPBC Approval
- RE 11.9.4 is a component of the SEVT TEC, for which clearing limits are also imposed by condition 25 of the EPBC Approval

The clearing limits in the Coordinator-General’s evaluation report for these matters (RE 11.4.3, 11.9.5 and 11.9.4) are a duplication of the disturbance limits contain in condition 25 of the EPBC approval. The ‘sensitive regional ecosystems disturbance limit’ table has subsequently become a requirement of another regulatory approval.

The Coordinator-General’s evaluation report also sets disturbance limits for three sensitive regional ecosystems for which clearing limits have not been explicitly stated in the EPBC approval (RE 11.3.2, 11.9.7 and 11.3.17).

Clearing limits for these REs are defined in Santos GLNG’s Upstream Significant Species Management Plan which was prepared for each of the threatened fauna species impacted by the project. These management plans were required under Condition 8 of the EPBC Approval.

The clearing of sensitive REs is also regulated by the project’s EA conditions under the EP Act issued in early 2011, with the latest amendment taking effect on 19 September 2017.

The EA requires the proponent to demonstrate that:

- no reasonable or practicable alternative exists for carrying out the limited petroleum activities within the environmentally sensitive area
- the limited petroleum activities are preferentially located in pre-existing areas of clearing or significant disturbance
- clearance widths for linear infrastructure is minimised to the maximum extent possible
- the maximum clearance widths specified in the EA for linear infrastructure are not exceeded.

Under the EP Act, RE 11.3.2 and 11.9.7 are considered to be Category C environmentally sensitive areas (ESA) (Essential Habitat and/or 'Of Concern' Regional Ecosystems) and RE 11.3.17, is a Category B ESA (Endangered Regional Ecosystems).

The relevant EA condition limits impacts to ESAs by limiting petroleum activities, dependant on the ESA type. Only "limited petroleum activities" are permitted within Category B and C ESAs. No petroleum activities are allowed in Category A ESAs.

Provided that the petroleum activities meet the definition of 'limited petroleum activities' which includes well sites and associated infrastructure, gathering pipelines and access tracks, as defined in the associated EAs, there is no maximum disturbance limit specified in the EA on the total area of disturbance within some Category C and Category B ESAs. This approach is applied consistently for all gas field EAs as identified in DES's Streamlined model conditions for petroleum activities (ESR/2016/1989).

This condition was imposed by the Coordinator-General under section 54B of the SDPWO Act as there was no relevant approval framework for the protection of these sensitive REs at the time. As the relevant project EAs and the EPBC approved Santos GLNG Upstream Significant Species Management Plan now regulate the clearing of sensitive regional ecosystems, it is not necessary that this matter be addressed by the Coordinator-General's imposed condition.

Essential habitat (*Vegetation Management Act 1999*) disturbance limits

This condition was imposed to regulate the clearing of essential habitat for two near-threatened flora species. Essential habitat is a Category C ESA under the EP Act. Essential habitat/Category C ESAs are regulated through the Santos EAs. Certain infrastructure types are restricted/regulated in Category C ESAs.

The Coordinator-General then imposed this condition under section 54B of the SDPWO Act as there was no relevant approval framework for the protection of Essential Habitat at the time. Given that habitat for *Apatophyllum teretifolium* and *Acacia calantha* is no longer classified as essential habitat, it is not necessary that the matter be addressed by the Coordinator-General's imposed condition.

Protected plant species (*Nature Conservation Act 1992*) disturbance limits

Santos GLNG is subject to the protected plants provisions under section 89 of the NC Act and Chapter 4 of the NC Reg, including the requirement for obtaining clearing permits.

Both species listed in the 'Protected plant species disturbed by gas field development' (*Apatophyllum teretifolium* and *Acacia calanthe*) were classed as 'rare' under the NC Act at

the time of the Coordinator-General's evaluation report. This class was removed in 2014, and wildlife were reclassified as 'endangered', 'vulnerable' and 'near threatened'. The plant species listed in this table were subsequently reclassified as 'near threatened'. Accordingly, these species are not considered matters of state or national environmental significance.

The contemporary protected plants framework regulates the clearing or taking of these plants. DES advised on 19 October 2017 that it was appropriate to remove this table. As a result, it is not necessary that the matter be addressed by the Coordinator-General's imposed condition.

Protected fauna species (*Nature Conservation Act 1992*) disturbance limits

The GLNG EPBC approval (2008/4059) issued on 22 October 2010 provided maximum disturbance limits for Phase 1 of the GLNG project. The EPBC approval variation issued on 15 April 2016 changed the conditions to provide maximum disturbance limits for the whole GLNG project.

The disturbance limits included in the condition are for matters which overlap with those addressed by the EPBC approval. All protected fauna species for which clearing limits are set by the Coordinator-General's evaluation report are also MNES for which clearing limits have been conditioned by the EPBC approval.

Further, these species and ecological communities are all contained within the Santos GLNG Upstream Significant Species Management Plan which has been approved by the Commonwealth Minister for the Environment. Offsets for these impacts have also been accounted for by the Commonwealth DEE.

As this condition has subsequently become a requirement of another regulatory approval, it is not necessary that the matter be addressed by the Coordinator-General's imposed condition.

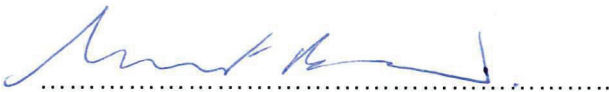
4. Conclusion

Pursuant to section 35I of the SDPWO Act, the evaluation of the Gladstone Liquefied Natural Gas application for project change, concludes that these conditions have become a requirement of other conditions of approval. Therefore, it is not necessary that the matter be addressed through imposed Condition 13 and imposed Condition 16 of Appendix 2—Gas Fields, Part 2 – Coordinator-General’s environmental conditions—gas fields: General Conditions for the gas fields.

Pursuant to section 35J of the SDPWO Act, a copy of this report will be given to the proponent, and a copy will be made available at:

www.statedevelopment.qld.gov.au/assessments-and-approvals/glng-project-changes

As per section 35K of the SDPWO Act, the Coordinator-General’s report on the EIS for the project, and the Coordinator-General’s change reports, both have effect for the project. However, if the reports conflict, the Coordinator-General’s change report prevails to the extent of any perceived inconsistency.



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21 March 2018

Appendix 1. Amended conditions

Former condition	New condition
<p>Condition 13, Part 2, Appendix 2</p> <p>The following requirements apply to clearing of plants protected under the <i>Nature Conservation Act 1992</i>:</p> <ul style="list-style-type: none"> a) clearing of plants must only occur in accordance with a clearing permit issued under the <i>Nature Conservation Act 1992</i> b) for near threatened, rare, vulnerable and endangered species listed under the Nature Conservation (Wildlife) Regulation 2006, and species identified as critical and high priority under the DERM “Back on Track” species prioritisation methodology, a Significant Species Management Plan detailing specific measures for the mitigation or offsetting of all impacts must be provided to DERM for approval c) offsets must be provided for the permanent loss (take) of near threatened, rare, vulnerable and endangered plants in accordance with the Queensland Government Environmental Offsets Policy 2008 and generally in accordance with the Queensland Government Policy for Biodiversity Offsets (Consultation Draft) d) type A restricted least concern plants (Schedule 7 of the Nature Conservation (Administration) Regulation 2006) must be salvaged and used for on-site revegetation purposes. This includes species in the Family: <i>Cycadaceae</i>, <i>Orchidaceae</i>, and <i>Zamiaceae</i>; and species in the genus: <i>Brachychiton</i>; <i>Hydnophytum</i>; <i>Huperzia</i>; <i>Livistona</i>; <i>Myrmecodia</i>; <i>Platynerium</i>; and <i>Xanthorrhoea</i> e) clearing shall be conducted in a sequential manner and in a way that directs escaping wildlife away from the activity and into adjacent natural areas f) rehabilitation of areas containing least concern plants that are disturbed during clearing activities, where required by the clearing permit, must be commenced within three (3) months of completion of pipeline construction. Revegetation should be consistent with the plant density, floristic composition and distribution of the surrounding regional ecosystem types and within the province of the vegetation being cleared g) for clearing impacts that result in permanent loss of least concern native plants (cannot be re-established within three (3) years of clearing or floristic modification), the permit holder must provide the DERM with a written detailed report of permanent vegetation loss, including the area, species affected and mapping of affected areas, within three (3) months of completion of the pipeline construction (Note: this is in addition to the required Return of operations). 	<p>Remove</p>

Condition 16, Part 2, Appendix 2 **Remove**

The following maximum disturbance limits apply to any disturbances authorised for the gas field activities environmental authority under the *Environmental Protection Act 1994* and any other relevant legislation.

Table: Sensitive Regional Ecosystem Disturbance Limit

Regional ecosystem	Description	VM Act status	Disturbance limit (ha)
11.4.3	<i>Acacia harpophylla</i> and/or <i>Casuarina cristata</i> shrubby open forest on Cainozoic clay plains	Endangered	3.3

11.9.5	<i>Acacia harpophylla</i> and/or <i>Casuarina cristata</i> open forest on fine-grained sedimentary rocks	Endangered	16.3
11.9.4	Semi-evergreen vine thicket on fine-grained sedimentary rocks	Endangered	0.8
11.3.2	<i>Eucalyptus populnea</i> woodland on alluvial plains	Of Concern	108.9
11.3.17	<i>Eucalyptus populnea</i> woodland with <i>Acacia harpophylla</i> and/or <i>Casuarina cristata</i> on alluvial plains	Of Concern	12.6
11.9.7	<i>Eucalyptus populnea</i> , <i>Eremophila mitchellii</i> shrubby woodland on fine-grained sedimentary rocks	Of Concern	1.3

Table: Essential Habitat (Vegetation Management Act 1999) Disturbance Limit

Remove

Regional ecosystem	Description	Species	Disturbance limit (ha)
11.9.4 / 11.10.1 / 11.10.13	Semi-evergreen vine thicket and open woodland to open forest	<i>Apatophyllum teretifolium</i>	1 (- 0.8 ha of vine thicket already accounted for)
11.10.1	<i>Corymbia citriodora</i> predominates and forms a distinct but discontinuous open-forest (to woodland) canopy (20-30m high).	<i>Acacia calantha</i>	2.8

Table: Protected Plant Species (Nature Conservation Act 1992) disturbed by gas field development

Remove

Species	NC Act status	Habitat type	Disturbance limit (ha)
<i>Acacia calantha</i>	Rare	Semi-evergreen vine thicket and open woodland to open forest	2.8 (- 1 ha of vine thicket already accounted for)
<i>Apatophyllum teretifolium</i>	Rare	<i>Corymbia citriodora</i> predominates and forms a distinct but discontinuous open-forest (to woodland) canopy (20-30m high).	1 (- 2.8 ha of <i>Corymbia citriodora</i> habitat type already accounted for)

Table: Protected fauna species (*Nature Conservation Act 1992*) disturbance limit **Remove**

Species	NC Act and EPBC status	Habitat type	Disturbance limit (ha)
Northern Quoll	Endangered	Rocky escarpments, open forest and open woodland	100.1
Large-eared pied bat, large pied bat	Vulnerable	Will forage adjoining woodlands and clearings	(108.1)
Black-Breasted Button-Quail	Vulnerable	Drier closed forests, particularly semi-evergreen vine thicket, low microphyll vine forest, <i>Araucarian microphyll</i> vine forest and <i>Araucarian notophyll</i> vine forest	0.1 (Already counted)
Red Goshawk	Vulnerable	Eucalypt woodland, open forest, gallery rainforest, and rainforest margins	139.4
Australian painted snipe	Vulnerable	Potentially any wetland and farm dams with suitable vegetation cover	(11.2)
Brigalow scalyfoot	Vulnerable	Lives in brigalow/vine thicket regrowth but not tolerant of clearings	205.3
Collared delma	Vulnerable	Open eucalypt and Acacia woodland with sparse understory of shrubs and tussocks or semi-evergreen vine thicket	41.6 (Already counted)
Squatter pigeon	Vulnerable	Grassy woodlands and open forest that are dominated by eucalypts	199.2
Ornamental snake	Vulnerable	Brigalow (<i>Acacia harpophylla</i>) woodland growing on clay and sandy soils, riverside woodland, and open forest growing on natural levees	44.0 (Already partially accounted for)
Yakka skink	Vulnerable	Open dry sclerophyll forest or woodland	119.9
Dunmall's snake	Vulnerable	Brigalow (<i>Acacia harpophylla</i>) forest and woodland growing on cracking black clay and clay loam soils	205.3 (Already partially accounted for)
Eastern long-eared bat	Vulnerable	River red gum forest, semi-arid woodlands and savannahs	275.4

Table: EPBC ecological communities disturbance limit**Remove**

Species	EPBC status	Habitat type	Disturbance limit (ha)
Brigalow ecological community	Endangered	Brigalow (Acacia harpophylla dominant and co-dominant) ecological communities	19.6 (Already counted)
Semi-evergreen vine thicket	Endangered	Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions	0.8 (Already counted)
Bluegrass ecological community	Endangered	Natural grasslands of the Queensland coastal highlands and the northern Fitzroy Basin	5.2

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