



Referral of proposed action

What is a referral?

The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) provides for the protection of the environment, especially matters of national environmental significance (NES). Under the EPBC Act, a person must not take an action that has, will have, or is likely to have a significant impact on any of the matters of NES without approval from the Australian Government Environment Minister or the Minister's delegate. (Further references to 'the Minister' in this form include references to the Minister's delegate.) To obtain approval from the Environment Minister, a proposed action should be referred. The purpose of a referral is to obtain a decision on whether your proposed action will need formal assessment and approval under the EPBC Act.

Your referral will be the principal basis for the Minister's decision as to whether approval is necessary and, if so, the type of assessment that will be undertaken. These decisions are made within 20 business days, provided sufficient information is provided in the referral.

Who can make a referral?

Referrals may be made by or on behalf of a person proposing to take an action, the Commonwealth or a Commonwealth agency, a state or territory government, or agency, provided that the relevant government or agency has administrative responsibilities relating to the action.

When do I need to make a referral?

A referral must be made for actions that are likely to have a significant impact on the following matters protected by Part 3 of the EPBC Act:

- World Heritage properties (sections 12 and 15A)
- National Heritage places (sections 15B and 15C)
- Wetlands of international importance (sections 16 and 17B)
- Listed threatened species and communities (sections 18 and 18A)
- Listed migratory species (sections 20 and 20A)
- Protection of the environment from nuclear actions (sections 21 and 22A)
- Commonwealth marine environment (sections 23 and 24A)
- Great Barrier Reef Marine Park (sections 24B and 24C)
- A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
- The environment, if the action involves Commonwealth land (sections 26 and 27A), including:
 - actions that are likely to have a significant impact on the environment of Commonwealth land (even if taken outside Commonwealth land);
 - actions taken on Commonwealth land that may have a significant impact on the environment generally;
- The environment, if the action is taken by the Commonwealth (section 28)
- Commonwealth Heritage places outside the Australian jurisdiction (sections 27B and 27C)

You may still make a referral if you believe your action is not going to have a significant impact, or if you are unsure. This will provide a greater level of certainty that Commonwealth assessment requirements have been met.

To help you decide whether or not your proposed action requires approval (and therefore, if you should make a referral), the following guidance is available from the Department's website:

- the Policy Statement titled Significant Impact Guidelines 1.1 – Matters of National Environmental Significance. Additional sectoral guidelines are also available.

- the Policy Statement titled Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies.
- the Policy Statement titled Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources.
- the interactive map tool (enter a location to obtain a report on what matters of NES may occur in that location).

Can I refer part of a larger action?

In certain circumstances, **the Minister may not accept a referral for an action that is a component of a larger action and may request the person proposing to take the action to refer the larger action for consideration under the EPBC Act (Section 74A, EPBC Act)**. If you wish to make a referral for a staged or component referral, read 'Fact Sheet 6 Staged Developments/Split Referrals' and contact the Referrals Gateway (1800 803 772).

Do I need a permit?

Some activities may also require a permit under other sections of the EPBC Act or another law of the Commonwealth. Information is available on the Department's web site.

Is your action in the Great Barrier Reef Marine Park?

If your action is in the Great Barrier Reef Marine Park it may require permission under the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). If a permission is required, referral of the action under the EPBC Act is deemed to be an application under the GBRMP Act (see section 37AB, GBRMP Act). This referral will be forwarded to the Great Barrier Reef Marine Park Authority (the Authority) for the Authority to commence its permit processes as required under the Great Barrier Reef Marine Park Regulations 1983. If a permission is not required under the GBRMP Act, no approval under the EPBC Act is required (see section 43, EPBC Act). The Authority can provide advice on relevant permission requirements applying to activities in the Marine Park.

The Authority is responsible for assessing applications for permissions under the GBRMP Act, GBRMP Regulations and Zoning Plan. Where assessment and approval is also required under the EPBC Act, a single integrated assessment for the purposes of both Acts will apply in most cases. Further information on environmental approval requirements applying to actions in the Great Barrier Reef Marine Park is available from <http://www.gbrmpa.gov.au/> or by contacting GBRMPA's Environmental Assessment and Management Section on (07) 4750 0700.

The Authority may require a permit application assessment fee to be paid in relation to the assessment of applications for permissions required under the GBRMP Act, even if the permission is made as a referral under the EPBC Act. Further information on this is available from the Authority:

Great Barrier Reef Marine Park Authority
2-68 Flinders Street PO Box 1379
Townsville QLD 4810
AUSTRALIA
Phone: + 61 7 4750 0700
Fax: + 61 7 4772 6093
www.gbrmpa.gov.au

What information do I need to provide?

Completing all parts of this form will ensure that you submit the required information and will also assist the Department to process your referral efficiently. If a section of the referral document is not applicable to your proposal enter N/A.

You can complete your referral by entering your information into this Word file.

Instructions

Instructions are provided in blue text throughout the form.

Attachments/supporting information

The referral form should contain sufficient information to provide an adequate basis for a decision on the likely impacts of the proposed action. You should also provide supporting documentation, such as environmental reports or surveys, as attachments.

Coloured maps, figures or photographs to help explain the project and its location should also be submitted with your referral. Aerial photographs, in particular, can provide a useful perspective and context. Figures

should be good quality as they may be scanned and viewed electronically as black and white documents. Maps should be of a scale that clearly shows the location of the proposed action and any environmental aspects of interest.

Please ensure any attachments are below three megabytes (3mb) as they will be published on the Department's website for public comment. To minimise file size, enclose maps and figures as separate files if necessary. If unsure, contact the Referrals Gateway (email address below) for advice. Attachments larger than three megabytes (3mb) may delay processing of your referral.

Note: the Minister may decide not to publish information that the Minister is satisfied is commercial-in-confidence.

How do I pay for my referral?

From 1 October 2014 the Australian Government commenced cost recovery arrangements for environmental assessments and some strategic assessments under the EPBC Act. If an action is referred on or after 1 October 2014, then cost recovery will apply to both the referral and any assessment activities undertaken. Further information regarding cost recovery can be found on the [Department's website](#).

Payment of the referral fee can be made using one of the following methods:

- **EFT Payments can be made to:**

BSB: 092-009

Bank Account No. 115859

Amount: \$7352

Account Name: Department of the Environment.

Bank: Reserve Bank of Australia

Bank Address: 20-22 London Circuit Canberra ACT 2601

Description: The reference number provided (see note below)

- **Cheque** - Payable to "Department of the Environment". Include the reference number provided (see note below), and if posted, address:

The Referrals Gateway

Environment Assessment Branch

Department of the Environment

GPO Box 787

Canberra ACT 2601

- **Credit Card**

Please contact the Collector of Public Money (CPM) directly (call (02) 6274 2930 or 6274 20260 and provide the reference number (see note below).

Note: in order to receive a reference number, submit your referral and the Referrals Gateway will email you the reference number.

How do I submit a referral?

Referrals may be submitted by mail or email.

Mail to:

Referrals Gateway

Environment Assessment Branch

Department of Environment

GPO Box 787

CANBERRA ACT 2601

- If submitting via mail, electronic copies of documentation (on CD/DVD or by email) are required.

Email to: epbc.referrals@environment.gov.au

- Clearly mark the email as a 'Referral under the EPBC Act'.
- Attach the referral as a Microsoft Word file and, if possible, a PDF file.
- **Follow up with a mailed hardcopy including copies of any attachments or supporting reports.**

What happens next?

Following receipt of a valid referral (containing all required information) you will be advised of the next steps in the process, and the referral and attachments will be published on the Department's web site for public comment.

The Department will write to you within 20 business days to advise you of the outcome of your referral and whether or not formal assessment and approval under the EPBC Act is required. There are a number of possible decisions regarding your referral:

The proposed action is NOT LIKELY to have a significant impact and does NOT NEED approval

No further consideration is required under the environmental assessment provisions of the EPBC Act and the action can proceed (subject to any other Commonwealth, state or local government requirements).

The proposed action is NOT LIKELY to have a significant impact IF undertaken in a particular manner

The action can proceed if undertaken in a particular manner (subject to any other Commonwealth, state or local government requirements). The particular manner in which you must carry out the action will be identified as part of the final decision. You must report your compliance with the particular manner to the Department.

The proposed action is LIKELY to have a significant impact and does NEED approval

If the action is likely to have a significant impact a decision will be made that it is a *controlled action*. The particular matters upon which the action may have a significant impact (such as World Heritage values or threatened species) are known as the *controlling provisions*.

The controlled action is subject to a public assessment process before a final decision can be made about whether to approve it. The assessment approach will usually be decided at the same time as the controlled action decision. (Further information about the levels of assessment and basis for deciding the approach are available on the Department's web site.)

The proposed action would have UNACCEPTABLE impacts and CANNOT proceed

The Minister may decide, on the basis of the information in the referral, that a referred action would have clearly unacceptable impacts on a protected matter and cannot proceed.

Compliance audits

If a decision is made to approve a project, the Department may audit it at any time to ensure that it is completed in accordance with the approval decision or the information provided in the referral. If the project changes, such that the likelihood of significant impacts could vary, you should write to the Department to advise of the changes. If your project is in the Great Barrier Reef Marine Park and a decision is made to approve it, the Authority may also audit it. (See "*Is your action in the Great Barrier Reef Marine Park*," p.2, for more details).

For more information

- call the Department of the Environment Community Information Unit on 1800 803 772 or
- visit the web site <http://www.environment.gov.au/topics/about-us/legislation/environment-protection-and-biodiversity-conservation-act-1999>

All the information you need to make a referral, including documents referenced in this form, can be accessed from the above web site.

Referral of proposed action

Project title: Jemena NEGI pipeline

1 Summary of proposed action

NOTE: You must also attach a map/plan(s) and associated geographic information system (GIS) vector (shapefile) dataset showing the location and approximate boundaries of the area in which the project is to occur. Maps in A4 size are preferred. You must also attach a map(s)/plan(s) showing the location and boundaries of the project area in respect to any features identified in 3.1 & 3.2, as well as the extent of any freehold, leasehold or other tenure identified in 3.3(i).

1.1 Short description

Use 2 or 3 sentences to uniquely identify the proposed action and its location.

This project involves the planning, construction and operation of a 622 km buried high-pressure gas pipeline from Tennant Creek in the Northern Territory to Mount Isa in Queensland along with associated above ground facilities at various locations along the pipeline. The proposed pipeline will be constructed in accordance with AS 2885 and the Australian Pipeline Industry Association Code of Environmental Practice – Onshore Pipelines (APIA 2013). A Right-of-way (ROW) of 30 m wide will be used for trench construction activities and will be fully rehabilitated, except for a small area for valves and cathodic protection (see Section 2), during the construction phase (subsequent inspections will be done by helicopter).

As the final alignment needs to have traditional owner, ecological survey and other landholder consent prior to construction (pursuant to legislation in both the Northern Territory and Queensland) a 20 km Planning Corridor is used in this assessment. The final alignment, after the above surveys, will be determined by June 2016.

1.2 Latitude and longitude

Latitude and longitude details are used to accurately map the boundary of the proposed action. If these coordinates are inaccurate or insufficient it may delay the processing of your referral.

Table 1. Coordinates of each pipeline turning point

Point	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
1	19	26	53.12	133	51	8.27
2	19	27	8.03	133	52	44.24
3	19	27	20.5	133	53	48.93
4	19	27	24.55	133	55	9.76
5	19	27	26.53	133	55	34.14
6	19	27	25.84	133	56	24.83
7	19	28	6.34	133	59	58.23
8	19	28	0.87	134	0	6.84
9	19	28	30.85	134	2	50.47
10	19	28	27.23	134	2	58.46
11	19	29	28.47	134	6	36.41
12	19	29	34.75	134	7	17.66
13	19	30	40.69	134	13	5.42
14	19	30	41.13	134	16	28.02
15	19	30	41.53	134	16	31.93
16	19	30	41.62	134	19	44.25
17	19	30	44.92	134	19	56.66
18	19	30	41.68	134	20	4.05
19	19	30	41.4	134	26	51.17
20	19	28	56.67	134	40	7.42

21	20	18	48.52	137	11	22.67
22	20	21	5.35	137	20	21.34
23	20	21	4	137	21	3.01
24	20	26	36.52	137	33	33.94
25	20	26	38.95	137	33	39.48
26	20	26	28.74	137	34	5.65
27	20	32	2.56	137	46	1.14
28	20	34	20.84	137	51	56.54
29	20	34	25.37	137	52	33.45
30	20	35	50.26	137	56	41.58
31	20	37	51.45	138	3	55.99
32	20	38	58.04	138	7	34.37
33	20	39	8.53	138	8	0.19
34	20	40	4.86	138	11	44.59
35	20	40	58.04	138	18	0.29
36	20	42	57.21	138	28	25.69
37	20	44	26.77	138	36	34.92
38	20	45	1.44	138	41	45.55
39	20	45	11.97	138	42	15.05
40	20	44	47.89	138	53	3.91
41	20	44	56.75	138	59	49
42	20	45	38.59	139	7	14.07
43	20	46	31.87	139	10	23.58
44	20	46	53.87	139	10	39.94
45	20	47	48.29	139	11	15.63
46	20	47	50.95	139	11	22.49
47	20	47	59.95	139	11	33.9
48	20	49	30.51	139	13	26.7
49	20	49	29.91	139	13	58.89
50	20	49	31.17	139	14	6.59
51	20	49	29.25	139	14	12.72
52	20	49	27.42	139	15	48.66
53	20	49	33.12	139	16	53.45
54	20	49	30.75	139	17	11.78
55	20	49	48.49	139	18	11.49
56	20	49	51.07	139	18	41.24
57	20	50	7.74	139	20	1.61
58	20	50	8.05	139	20	11.81
59	20	49	52.98	139	20	31.99
60	20	48	42.19	139	21	46.63
61	20	48	42.36	139	22	40.74
62	20	48	48.06	139	22	51.17
63	20	48	48.8	139	23	44.11
64	20	48	44.99	139	23	50.71
65	20	48	43.72	139	23	52.42
66	20	48	42.95	139	23	56.12
67	20	48	44.05	139	24	1.34
68	20	48	44.77	139	24	7.8
69	20	48	39.29	139	24	55.38
70	20	48	35.73	139	25	4.43
71	20	48	36.15	139	25	10.83

72	20	48	39	139	25	19.88
73	20	48	52.72	139	25	35.97
74	20	48	57.65	139	25	45.36
75	20	48	58.12	139	25	48.65
76	20	48	59.98	139	25	52.28
77	20	49	2.64	139	25	54.49
78	20	49	4.42	139	25	57.43
79	20	49	6.3	139	26	1.86
80	20	49	7.56	139	26	7.08
81	20	49	7.62	139	26	10.29
82	20	49	10.67	139	26	18.4
83	20	49	15.83	139	26	18.86
84	20	49	19.63	139	26	20.78
85	20	49	22.62	139	26	32.39
86	20	49	29.41	139	26	50.38
87	20	49	25.9	139	27	2.93
88	20	49	23.14	139	27	19.95
89	20	49	21.29	139	27	24.03
90	20	49	20.43	139	27	27.63
91	20	49	21.04	139	27	34.12
92	20	49	17.86	139	27	48.32
93	20	49	14.27	139	27	54.8
94	20	48	55.94	139	28	3.92
95	20	48	46.86	139	28	11.87
96	20	48	42.37	139	28	21.13
97	20	48	41.1	139	28	23.38
98	20	48	35.41	139	28	29.62
99	20	48	14.96	139	28	47.61
100	20	47	48.48	139	29	1.24
101	20	47	35.88	139	29	17.85
102	20	46	47.88	139	29	2.53

If the proposed action is linear (eg. a road or pipeline), provide coordinates for each turning point.

If the proposed action is linear (eg. a road or pipeline) please provide a polyline layer (refer to GIS data supply guidelines at [Attachment A](#)).

Do not use AMG coordinates.

1.3 Locality and property description

Provide a brief physical description of the property on which the proposed action will take place and the project location (eg. proximity to major towns, or for off-shore projects, shortest distance to mainland).

The 622 km pipeline will connect to the existing Amadeus Gas Pipeline at Warrego, approximately 45 km north-west of Tennant Creek in the Northern Territory and terminate just south of Mount Isa in Queensland where it will connect to the existing Carpentaria Gas Pipeline. The majority of land traversed by the proposed pipeline route is semi-arid pastoral land used for grazing cattle. Besides the rocky hills at either end of the pipeline route, the countryside is generally flat. The pipeline crosses ephemeral waterways, creeks and gullies. The land affected by this development is outlined in Section 1.6 below. The location of the proposed NEGI alignment is shown in Figure 1 (figures are attached in Appendix A). Properties through which the proposed alignment passes are shown in Figure 2.

1.4 Size of the development footprint or work

The components of the development footprint are outlined in Table 2. This table also shows the area to be rehabilitated.

area (hectares)

Topsoil and cleared native grasses and shrubs will be stockpiled and placed back over the ROW progressively during the construction process. The entire ROW will be rehabilitated back to native grass and shrub cover on completion of construction activities and operational inspection and maintenance requirements will be performed using helicopter access. Construction camps and the majority of access tracks will also be rehabilitated on completion of the construction phase. Approximately 10% of the total disturbance area will remain for operational requirements, which represents the land area required for the compressor stations, MLV sites, scraper station sites and two new permanent access tracks.

Table 2. Disturbance and rehabilitation footprint (for the entire route)

TEMPORARY FOOTPRINT		
Component	Disturbance footprint (ha)	Area rehabilitated (ha)
ROW	622 km x 30m = 1,866 ha	1,866 ha
Temporary Construction camps x 5	250 m x 350 m = 8.75 ha 5 sites = 43.75 ha total	43.75 ha
Access tracks (new - temporary)	77.5 ha	77.5 ha
Access track turn-off Barkly Highway	30 m x 30 m at start each track	1.6 ha
Access track turnoff to ROW	30 m x 30 m at each track end	2.43 ha
Vehicle turnarounds	35 m x 35 m = 0.1 ha AND 15 m x 15 m = 0.02 ha Every 5 km along ROW	18.2 ha
Explosives storage areas x 5	15 m x 15 m = 0.02 ha 5 sites = 0.1 ha	0.1 ha
Extra workspace outside sensitive crossing zones; Existing access tracks (174) Sealed Road Crossing (bore) (6) Rail Crossing (bore) (2) Major Water Course crossing (20) Minor Water Course crossing (88) Fence crossing (34) Buried Pipeline crossing (2)	Each 10m x 30m Each 25m x 50m Each 25m x 50m Each 25m x 50m Each 10m x 30m Each 10m x 30m Each 25m x 50m	5.22 ha 0.75 ha 0.25 ha 2.5 ha 2.64 ha 1.02 ha 0.25 ha
Low Hazard Water bore dams for dust suppression and ROW (small) 3ML (6 of)	Each 50 m x 50 m	1.5 ha
Low Hazard Water bore dams for hydrotesting (large) 8ML (2 of)	Each 80 m x 80 m	1.28 ha
TOTAL AREA	2025 ha	2025 ha

PERMANENT FOOTPRINT		
Component	Disturbance footprint (ha)	Area rehabilitated (ha)
Access tracks (new - permanent)	25 ha	-
Mount Isa Compressor Station (QLD)	300 m x 300 m = 9 ha	-
Phillip Creek Compressor Station (NT)	300 m x 300 m = 9 ha	-
MLV's x 2 and Scraper Station x 1 (NT) To be upgraded to compressor stations in the future	200 m x 200 m each 3 sites = 12 ha total	-
MLV x 1 (QLD)	200 m x 200 m = 4	-
Cathodic Protection Station x 4	20 m x 20 m = 0.04 ha 4 sites = 0.16 ha total	-
TOTAL AREA	60 ha	-

1.5 **Street address of the site** N/A

Lot description

Describe the lot numbers and title description, if known.

The land affected by this development is outlined in Table 3 for the Northern Territory and Table 4 for Queensland.

Table 3. Lot numbers and tenure along Northern Territory part of proposed alignment

Land Parcel	Registered Proprietor/ Controlling Agency	Title Reference	Land Description (all land in title)	Tenure
000//00408/	Charles John Warby & Judy-Anne Warby	CT 740/673	NT Portion 408 plan CP005047	Perpetual Pastoral Lease 00946
000//05691/	AustralAsia Railway Corporation	CT 754/364	NT Portion 5476 plan S98/186A-E, NT Portion 5691 plan S98/37	Crown Lease Term 01880
000//03723/	Warumungu Aboriginal Land Trust	CT 792/461	NT Portion 3723 plan S89/296	Freehold under ALRA
000//01075/	Gordon Ford, Joan Suzanne Ford, Gregory Joseph Ford & Ken Gerard Ford	CT 787/851	NT Portion 494, NT Portion 1075, NT Portion 5843 plan S98/34F, NT Portion 5845 plan S98/34H, NT Portion 5847 plan S98/34J, NT Portion 5849 plan S98/34L, NT Portion 5851 plan S98/34O&P	Perpetual Pastoral Lease 01142
000//04469/	Dept Lands, Planning & the Environment 141212	No Current Title Issued	NT Portion 4469 plan S921090	Vacant Crown Land
000//00773/	Baldy Bay Pty Ltd as trustee for the Long Yard Trust	CT 770/820	NT Portion 773 plan CP005208	Perpetual Pastoral Lease 00988
000//03976/	Wakaya Aboriginal Land Trust	CT 390/071	NT Portion 1414 plan S72/199, NT Portion 3976 plan S91/78A-F	Freehold under ALRA
000//03747/	Arruwurra Aboriginal Corporation	CT 211/054	NT Portion 3747 plan S89/164A	NT Enhanced Freehold.
000//03753/	Arruwurra Aboriginal Corporation	CT 211/060	NT Portion 3753 plan S89/164C	NT Enhanced Freehold
000//03752/	Arruwurra Aboriginal Corporation	CT 211/059	NT Portion 3752 plan S89/164C	NT Enhanced Freehold
000//03751/	Arruwurra Aboriginal Corporation	CT 211/058	NT Portion 3751 plan S89/164C	NT Enhanced Freehold
000//03750/	Arruwurra Aboriginal Corporation	CT 211/057	NT Portion 3750 plan S89/164B	NT Enhanced Freehold
000//00002/	The North Australian Pastoral Company Pty Ltd	CT 699/625	NT Portion 2 plan CP004314	Perpetual Pastoral Lease 00914
000//03757	Arruwurra Aboriginal Corporation	CT 211/064	NT Portion 3757 plan S89/164C	NT Enhanced Freehold

000//03758	Arruwurra Aboriginal Corporation	CT 211/065	NT Portion 3758 plan S89/164C	NT Enhanced Freehold
000//03759	Arruwurra Aboriginal Corporation	CT 211/066	NT Portion 3759 plan S89/164C	NT Enhanced Freehold
000//00004/	The North Australian Pastoral Company Pty Ltd	CT 699/624	NT Portion 4 plan CP004314	Perpetual Pastoral Lease 00916
000//00298/	Australian Agricultural Company Limited	CT 738/069	NT Portion 298 plan CP004303	Perpetual Pastoral Lease 00926
000//01605/	Waxahachie Pty Ltd	CT 738/071	NT Portion 1605 plan CP005053	Perpetual Pastoral Lease 00922

Table 4. Lot numbers and tenure along Queensland part of proposed alignment

Land Parcel	Registered Proprietor/ Controlling Agency	Title Reference	Land Description (all land in title)	Tenure
2799/SP276507	Waxahachie Pty Ltd	17666033 - PH 13/2799	Lot 2799 Survey Plan 276507	Rolling Term Lease - No purpose defined
42/CP847157	Australian Cattle and Beef Company Pty Ltd	17665245 - PDH 8/42	Lot 42 Crown Plan 847157	Rolling Term Lease - No purpose defined
3/SP117500	Venlock Pty Ltd	40020668 - PH 0/212277	Lot 3 Survey Plan 117500	Rolling Term Lease - Pastoral
24/SP265794	James Lyne Lord & Marjorie Annette Lord	17666019 - PH 13/2324	Lot 24 Survey Plan 265794	Rolling Term Lease - No purpose defined
1/RD243	Argylla Mountains Pastoral Pty Ltd as Trustee for Campbell Family Trust	17740120 - SL 13/52818	Lot 1 Crown Plan RD243	Rolling Term Lease - Primary Industry (Grazing)
265/FTY1762	The State of Queensland (represented by Department of National Parks, Recreation, Sport & Racing)	47552008	Lot 265 Crown Plan FTY1762	Estate in Forest Estate
575/SP110102	Argylla Mountains Pastoral Pty Ltd as Trustee for Campbell Family Trust	17662192 - OL 13/573	Lots 572, 574 and 575 Crown Plan 857742, Lot 573 Survey Plan 110102	No Term Lease - No purpose defined

10/SP240553	The State of Queensland (represented by Department of Natural Resources & Mines - Land Act)	47038916	Lot 10 Survey Plan 240553	Estate in Unallocated State Land
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In addition to the above there are registered and determined native title claims over various parcels of land as follows:

Northern Territory

1. Land parcel 000//00408/: Phillip Creek Pastoral Lease native title claim (DC2014/009).
2. Land Parcel 000//00002/: Dalmore Downs native title claim ((DC2001/030) and the Dalmore Downs South native title claim (DC2002/002).
3. Land Parcels 000//00004/, 000//00298/ and 000//01605/: the Burramurra native title claim (DC2002/0152).

Queensland

4. Land Parcels 2799/SP276507 and 42/CP847157: the Indjalandji-Dhidhanu Aboriginal Corporation determined native title area.
5. Land Parcels 24/SP265794, 1/RD243, 265/FTY1762, 575/SP110102, and 10/SP240553 the Kalkadoon #4 determined native title area.

1.7 **Local Government Area and Council contact (if known)**

If the project is subject to local government planning approval, provide the name of the relevant council contact officer.

This action sits across two Local Government Areas (LGA's):

Table 5. LGA's of the development

LGA	State	Contact
Barkly Regional Council	NT	Edwina Marks – CEO
Mt Isa City Council	QLD	Emilio Cianetti - CEO

Time frame

Specify the time frame in which the action will be taken including the estimated start date of construction/operation.

The proposed timeframe for delivery of the NEGI project is summarised in Table 6 below.

Table 6. NEGI timeframe summary

Milestone	Date
Desktop Ecological Assessment	Completed April 2015
EPBC Referral Submitted	August 2015
Submission of Environmental Authority to Queensland Government	August 2015
Submission of Notice of Intent to Northern Territory Government	August 2015
Submission of Request for Final Proposal to Northern Territory Government	30 September 2015
Awarding successful proponent to construct and operate pipeline	1 st January 2016
Field survey work (summer)	March 2016
Field survey work (winter)	May 2016
Cultural heritage surveys	March to May 2016
Environmental approvals processes in the NT and Queensland complete	October 2016
Landholder agreements	December 2016
Indigenous land agreements	December 2016
Construction phase begins	January 2017
Commission	May - June 2018
Commercial operation	July 2018

1.9	Alternatives to proposed action Were any feasible alternatives to taking the proposed action (including not taking the action) considered but are not proposed?	X	No
			Yes, you must also complete section 2.2
1.10	Alternative time frames etc Does the proposed action include alternative time frames, locations or activities?	X	No
			Yes, you must also complete Section 2.3. For each alternative, location, time frame, or activity identified, you must also complete details in Sections 1.2-1.9, 2.4-2.7 and 3.3 (where relevant).
1.11	State assessment Is the action subject to a state or territory environmental impact assessment?		No
		X	Yes, you must also complete Section 2.5
1.12	Component of larger action Is the proposed action a component of a larger action?	X	No
			Yes, you must also complete Section 2.7
1.13	Related actions/proposals Is the proposed action related to other actions or proposals in the region (if known)?	X	No
			Yes, provide details:
1.14	Australian Government funding Has the person proposing to take the action received any Australian Government grant funding to undertake this project?	X	No
			Yes, provide details:
1.15	Great Barrier Reef Marine Park Is the proposed action inside the Great Barrier Reef Marine Park?	X	No
			Yes, you must also complete Section 3.1 (h), 3.2 (e)

2 Detailed description of proposed action

NOTE: It is important that the description is complete and includes all components and activities associated with the action. If certain related components are not intended to be included within the scope of the referral, this should be clearly explained in section 2.7.

2.1 Description of proposed action

This should be a detailed description outlining all activities and aspects of the proposed action and should reference figures and/or attachments, as appropriate.

Information and Background

SGSP (Australia) Assets Pty Ltd (Jemena) is an energy infrastructure company that builds, owns and operates a combination of major gas, electricity and water assets across Australia. In 2014, the Northern Territory Government (The Territory) sought proposals for the development of a gas pipeline connecting the Northern and Eastern Gas Markets to be known as the North East Gas Interconnector (NEGI). The NEGI will connect gas fields in Northern Australia with customers in the Eastern Gas Market.

Jemena has been shortlisted as one of the companies to build, own and operate the proposed gas pipeline and is currently going through a competitive process with three other companies. By the end of September 2015, all four companies are required to submit their respective Final Proposals to the Territory's Request for Final Proposal (RFFP), with one eventually being selected as preferred proponent by the Territory.

Jemena is seeking to submit a firm tariff offer to the Territory, which requires a degree of both price and project timing certainty. The timeframes to deliver the project are short with an expectation that the pipeline would be in operation by mid-2018. The approvals for the project are on the critical path for meeting this date. To assist with defining timing certainty and to help meeting the early gas operation date, Jemena is aiming to have its overarching environmental approvals including EPBC Referral, Notice of Intent for the Northern Territory and Environmental Approval for Queensland submitted before the end of September 2015. The proposed project delivery timeline requires final environmental approvals to be granted by October 2016.

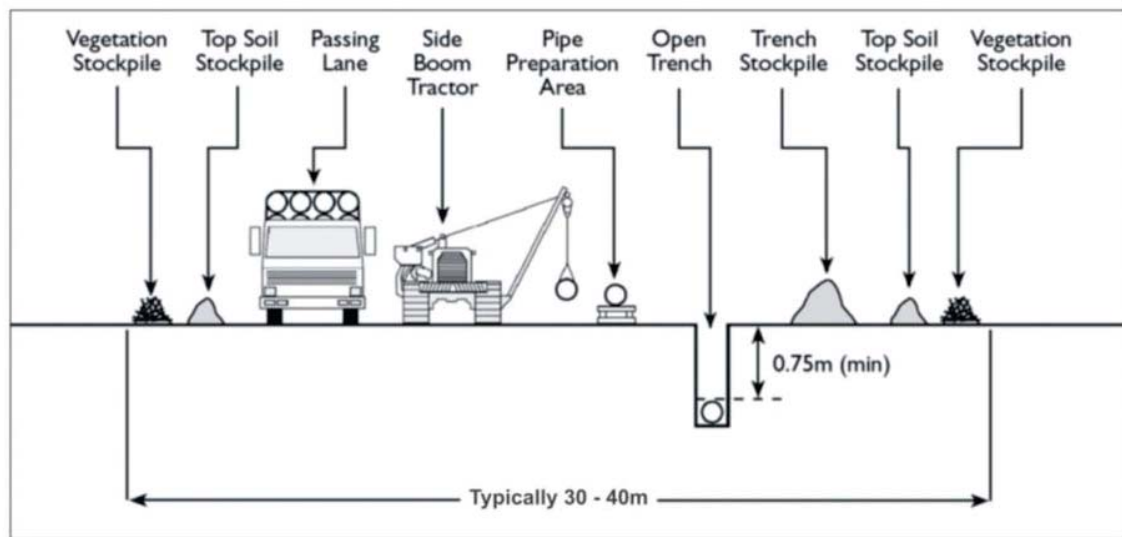
Broadly, the NEGI project involves the planning, construction and operation of a 622 km buried high-pressure gas pipeline from Tennant Creek in the Northern Territory to Mount Isa in Queensland along with associated above ground facilities at various locations along the pipeline. Two Compressor Stations will be required, one at Warrego (near Tennant Creek) and the other at Mount Isa along with two Mainline Valves (MLV's) and one Scraper Station at various intervals along the pipeline. For future increased capacity additional compressor stations will be installed at each of the MLV and Scraper station sites in the Northern Territory; these will be readily accessible from existing permanent roads after the other temporary construction access tracks are rehabilitated. Temporary construction camps and support facilities will also be required along the pipeline route during the construction phase.

The initial alignment for the proposed pipeline was determined through desktop assessment of land tenure, geology / soils, roads and the location of Indigenous communities. Using the initial alignment as the basis, the process for selection of the final alignment on which the pipeline will be constructed is as follows:

1. Identification of a 20km wide Planning Corridor.
2. Definition of a 100m wide Alignment Corridor within which all pipeline construction activities can occur.
3. Selection of a 30m Pipeline Construction ROW.

The Alignment Corridor will be confirmed through discussions and negotiations with landholders and Aboriginal land interests. Cultural heritage (archaeological and ethnographic) and ecological surveys will be undertaken over the Alignment Corridor to ensure that there are no constraints to pipeline construction activities and for the purposes of obtaining the relevant approvals and agreements, particularly relating to cultural heritage.

Within the Alignment Corridor the Construction ROW will be 30m wide with additional extra workspace as required. Areas for access tracks, temporary workers camps and pipe and equipment laydown will also be determined during the planning phase and to the greatest extent possible will be within the Construction ROW. Where possible, access to the Construction ROW will be via existing roads and tracks and temporary workers camps will be located on already disturbed land. Access tracks and temporary workers camps will be removed and rehabilitated following completion of construction, excepting those tracks that were pre-existing unless agreements with landholders require otherwise. Layout of ROW is shown in diagram below.



Source: APGA

Detailed description of proposed action

The project will involve the construction of an approximately 622 km high-pressure gas pipeline from Tennant Creek in the Northern Territory (NT) to Mount Isa in Queensland; 165 km in Queensland and 457 km in the NT. At Tennant Creek the pipeline will join the Amadeus Gas Pipeline, in Queensland the pipeline will connect to the Carpentaria Gas Pipeline. The NEGI pipeline will transport gas from the Amadeus Gas Pipeline to the Carpentaria Gas Pipeline.

The land to be traversed by the NEGI pipeline comprises mainly pastoral leases dominated by cattle grazing over open downs country supporting Mitchell, Buffel and other grasses across large sections of black soil plains and lighter sandy country. There are existing gas and power facilities at both the Northern Territory and Queensland ends of the NEGI alignment. Outback tourism including gem fossicking, camping, bird watching and sightseeing are mainly associated with the main regional centres of Tennant Creek and Mount Isa.

Camooweal is the closest town and 78 km north of the NEGI alignment. There are three small Aboriginal communities in the Northern Territory being Purrukuwuru (13.6 km south of NEGI alignment), Wonara community (15 km north of NEGI alignment) and Alpururulam (45 km south of the NEGI alignment). There are five small pastoral homesteads within the vicinity of the NEGI alignment, these are:

Northern Territory

- Barkly Roadhouse 16.3 km
- Avon Downs 38 km
- Austral Downs 3.5 km
- Lake Nash 39.5 km

Queensland

- Barkly Downs 26.6 km

The pipeline will be laid in a trench with a minimum depth of cover of 750 mm. At watercourse crossings, the minimum depth of cover will be increased to at least 1,200mm. A 30m wide ROW will be established for construction and fully rehabilitated after construction is complete. The proposed pipeline will be designed, operated and constructed in accordance with AS 2885 and the Australian Pipeline and Gas Association Code of Environmental Practice – Onshore Pipelines (APIA 2013).

Planning Phase

The alignment for the proposed pipeline was determined through desktop assessment of land tenure, geology/soils, roads and the location of Indigenous communities. To assist planning a 20 km buffer is used around this alignment; this is called the Planning Corridor. The final alignment will be selected within this Planning Corridor after cultural heritage and ecological surveys are completed; and after discussion with landholders and negotiations with Aboriginal land interests.

Other areas for access tracks, temporary workers camps and pipe and equipment laydown will also be determined during the planning phase. Where possible access will be via existing roads and tracks and temporary workers camps will be located on already disturbed land. Access tracks and temporary workers

camps will be removed and rehabilitated following completion of construction, excepting those tracks that were pre-existing.

Construction Phase

Gas Pipeline

The proposed pipeline route will require a 30 m Right of Way (ROW) to support key construction activities including clearing and grading the construction right of way (ROW), digging the pipeline trench, spoil placement, stringing and welding the pipeline (laying the pipe sections end to end and welding the lengths together), lowering-in and then backfilling the trench. On the ROW vegetation topsoil will be cleared and stockpiled along the edge of the ROW for later reuse. After returning soil to the trench, the ROW will be rehabilitated by replacing excavated soil, contouring the soil surface to the surrounding land surface and then re-spreading the stockpiled vegetation and topsoil across the disturbed areas. Other areas used in construction (such as truck turnarounds and temporary camps) will be rehabilitated as soon as practical after the area's construction activities are completed.

Temporary access tracks will also be established to provide construction access to the ROW, apart from the small number of these that will remain in place for permanent access to the above ground facilities, the majority will be rehabilitated after pipeline construction activities are completed.

Watercourse crossings

While one of the considerations for route selection was to avoid major river crossings, the proposed pipeline crosses numerous small ephemeral creeks and gullies as well as some larger ephemeral creeks; the latter are shown in the table below. Pipeline installation activities will only occur in the dry season to minimise impacts to watercourses.

When constructing in riparian areas the width of vegetation cleared will be reduced to the minimum possible to allow for trenching, pipeline installation and vehicle movement. River and stream banks will be carefully and quickly rehabilitated to the standard acceptable by the regulatory authorities in NT and Queensland.

Table 7. Intersected watercourses

Name	Hierarchy	Hydrology	State
Blue Bush Creek	Major	Non Perennial	NT
Georgina River	Major	Non Perennial	NT
Gosse River	Major	Non Perennial	NT
James River	Major	Non Perennial	NT
James River	Minor	Non Perennial	NT
Jimmy Creek	Minor	Non Perennial	NT
Kurundi Creek	Major	Non Perennial	NT
Mica Creek	Minor	Non Perennial	QLD
Mingera Creek	Major	Non Perennial	QLD
One Mile Creek	Minor	Non Perennial	QLD
Poison Creek	Minor	Non Perennial	NT
Polygonum Creek	Major	Non Perennial	QLD
Ranken River	Major	Non Perennial	NT
Redbank Creek	Major	Non Perennial	QLD
Templeton River	Major	Non Perennial	QLD
Templeton River	Minor	Non Perennial	QLD
Tennant Creek	Major	Non Perennial	NT
Whistleduck Creek	Major	Non Perennial	NT
Yaringa Creek	Major	Non Perennial	QLD
Yaringa Creek	Minor	Non Perennial	QLD

Access Tracks

To minimise land disturbance, existing roads and tracks will be used wherever possible and all vehicular movements will be confined to the roads, tracks and extra work space areas that have been approved for the project. The main sealed access roads for the project will be the Warrego Road, the Barkly Highway and the Diamantina Development Road. Other local roads that connect these main roads along with approved landholder access tracks will also be used. Where practicable existing access tracks will be used rather than new access tracks developed. If new access tracks are required they will be identified in consultation with landholders and planned to either avoid or minimise any impacts to environmental and culturally sensitive areas. Rehabilitation of temporary access tracks will be done in consultation with landholders. The proposed location of these tracks will be determined in the planning phase with the final location being confirmed after the cultural heritage and ecological survey (approximately May 2016).

Temporary workers' accommodation camps

It is expected that there will be five temporary workers' accommodation camps located along the proposed pipeline route for workers to live in during the construction phase of the project; of which it is expected that only three will be operational at any one time. These will be removed and relocated as the pipeline construction progresses along the route. It is anticipated that the construction camps will accommodate up to 380 people in total with approximately 140 the maximum in any one camp. The camps will include living quarters, a kitchen and recreational areas and will be located close to the proposed pipeline route, within the Planning Corridor. Construction depots will typically be co-located with the camps to minimise disturbance to the environment. Each temporary workers accommodation camp will be self-contained and will have its own power generation and sewage treatment and will require the clearing of vegetation of approximately 250 x 350. Potable water will be trucked in from Mount Isa, Camooweal or Tennant Creek.

The following principles to avoid and / or reduce environmental impacts will be utilised when identifying the construction camp locations:

- (i) Nearby to ROW to minimise crew driving distances.
- (ii) No significant species, potential habitat for threatened species or cultural heritage values (as determined through survey).
- (iii) Away from water bodies either ephemeral or permanent.
- (iv) Suitable soil type that will readily rehabilitate.
- (v) Low erosion potential (either soil type or slope).
- (vi) Where at all possible they will be sited in previously disturbed areas.
- (vii) Areas of mature, healthy vegetation will be avoided.
- (viii) Away from areas of intact mature vegetation.

Vegetation clearing of the areas for the accommodation camps will follow a similar process to the ROW: both topsoil and seed source material will be stockpiled. On completion all construction materials will be removed from site, the land surface will be re-contoured to surrounding levels and topsoil and vegetation will be re-spread across the area.

The proposed location of these camps will be determined in the planning phase with the final location being confirmed after the cultural heritage and ecological survey work (approximately May 2016).

Water

Water for dust suppression and hydrostatic testing will be required to be sourced from temporary dams; the number and area disturbed for each dam is shown in Table 2. The location of these dams (and the associated regulatory approvals) will be further developed during the planning phase in 2016.

Hydrostatic Testing

The integrity of the pipeline will be tested by filling it with water and pressurising it to above the operating pressure. Hydrostatic testing procedures, including water sourcing and disposal, will be determined during the design and construction phase. It is estimated that 15ML of water will be required for this testing. At least one month prior to commencement of hydrostatic pressure testing activities, a hydrostatic test water management plan (HTWMP) will be submitted to the relevant authorities in the NT and Queensland.

The HTWMP will include the following details:

- Volume and source of test water;
- Proposed method and location of reuse and / or disposal; and
- Proposed management measures to avoid or minimise environmental impacts including sourcing, storage, treatment, reuse and / or disposal of test water.

Compressor stations

Compressor Stations will be installed at the Tennant Creek and Mt. Isa ends on the pipeline with additional compressor stations also proposed for future expansion at each of the MLV and Scraper station sites in the Northern Territory; these will be readily accessible from existing permanent roads after the other temporary construction access tracks are rehabilitated.

The two compressor stations are proposed to be similar in design. Each station will comprise two Solar Taurus 60 gas turbine driven compressor units (or equivalent). Whilst it is proposed that power be supplied by two duty/standby gas engine alternators (GEA) at each site, with fuel supplied from the gas pipeline, Jemena are also exploring the three-phase power availability to reduce the reliance on GEA's. Each station will also have a permanently manned office, control room, workshop and amenities. Small quantities of lube oil will be stored at each end for maintenance purposes.

Fuel Storage

Camps will have fuel storage of up to peak fuel capacity of 252,000L (three fuel tanks (75,000L)) and 3 Fuel Tankers (9,000L). The fuel will be stored and transported according to appropriate legislation and standards in each jurisdiction.

Sewerage

It is proposed that sewage from temporary construction camps be treated on site through use of septic or transportable treatment units. After thorough treatment, effluent may be irrigated to land in accordance with licensed effluent discharge limits.

Explosives Storage

Explosives may be required for rocky areas. Explosives will be stored in small fenced and locked facility nearby to each campsite.

Operation Phase

The operation of the pipeline will be in accordance with approval documentation, a specific Environmental Management Plan (EMP), and relevant standards and codes.

All inspections along the pipeline route will be performed by helicopter allowing the ROW to be completely rehabilitated.

Decommissioning

When, and if, the proposed pipeline is no longer required, it will be decommissioned in accordance with the legislative and regulatory requirements and accepted environmental best practices and standards applicable and relevant at that time. Currently, decommissioning procedures require the removal of all above ground infrastructure (including all scraper station plant, pipeline valves and metering stations) and the restoration of associated disturbed areas.

2.2 Alternatives to taking the proposed action

This should be a detailed description outlining any feasible alternatives to taking the proposed action (including not taking the action) that were considered but are not proposed (note, this is distinct from any proposed alternatives relating to location, time frames, or activities – see section 2.3).

N/A

2.3 Alternative locations, time frames or activities that form part of the referred action

If you have identified that the proposed action includes alternative time frames, locations or activities (in section 1.10) you must complete this section. Describe any alternatives related to the physical location of the action, time frames within which the action is to be taken and alternative methods or activities for undertaking the action. For each alternative

location, time frame or activity identified, you must also complete (where relevant) the details in sections 1.2-1.9, 2.4-2.7, 3.3 and 4. Please note, if the action that you propose to take is determined to be a controlled action, any alternative locations, time frames or activities that are identified here may be subject to environmental assessment and a decision on whether to approve the alternative.

N/A

2.4 Context, planning framework and state/local government requirements

Explain the context in which the action is proposed, including any relevant planning framework at the state and/or local government level (e.g. within scope of a management plan, planning initiative or policy framework). Describe any Commonwealth or state legislation or policies under which approvals are required or will be considered against.

Commonwealth

The Commonwealth legislation governing the primary approvals for the project are listed below:

- Environmental Protection and Biodiversity Conservation Act 1999;
- Aboriginal Land Rights (NT) Act 1976;
- Native Title Act 1993; and
- Australian Jobs Act 2013

Northern Territory

The Northern Territory section of the Planning Corridor passes through sections of pastoral land, freehold and vacant land. Approvals to construct the pipeline are subject to the requirements under:

- Environmental Assessment Act (EA Act);
- *Environmental Assessment Administrative Procedures* (EAAP).
- *Energy Pipeline Act & Energy Pipeline Regulations*

In addition to the above legislation governing primary approvals processes, approvals may be required (and will be considered against the following legislation:

Aboriginal Land Act 1980;

- NT Parks and Wildlife Conservation Act 1976;
- NT Fisheries Act 1988;
- Water Act 1992;
- Traffic Act;
- Heritage Act 2012;
- Aboriginal Land Act (NT) 1979;
- Aboriginal Sacred Sites Act 1989;
- Crown Lands Act 1992;
- Pastoral Lands Act 1992;
- Planning Act 2009;
- NT Dangerous Goods Regulations 1998;
- AustralAsia Railway (Special Provisions) Act 1999.

Queensland

The primary approvals for the Queensland section of the project are:

- Environmental Protection Act 1994;
- Petroleum and Gas (Production and Safety) Act 2004; and
- Aboriginal Cultural Heritage Act 2003.

In addition to the primary approvals required under the above legislation there are secondary approvals and planning considerations. At a state level approvals may be required and will be considered against the following legislation:

- Sustainable Planning Act 2009;
- Nature Conservation Act 1992;
- Water Act 2000.
- Transport Infrastructure Act 1994;
- Land Act 1994;
- Transport Operations (Road Use Management) Act 1995;

- Transport Operations (Roads Use Management – Mass, Dimensions and Loading) Regulation 2005;
- Queensland Heritage Act 2005;
- Work Health and Safety Act;
- Land Titles Act 1994;
- Forestry Act 1959;
- Explosives Act 1999;
- Electrical Safety Act 2002;
- Environment Protection (Waste Management) Regulation 2000;
- Survey and Mapping Infrastructure Act 2003; and
- Any Regional Council Subordinate Local Laws.

Mount Isa sits within the area covered by the North West Regional Plan 2010-2031. This plan provides policies on planning issues for the central western Queensland belt running from Mount Isa Council to Flinders Council. The Planning Corridor is entirely located within the Mount Isa City Local Government area, situated within far western Queensland. As such the project is subject to the provisions of the Mount Isa City Council Planning Scheme, as well as Queensland's Sustainable Planning Act 2009. Under the Planning Scheme the Planning Corridor is located entirely within areas zoned 'Rural'.

2.5 Environmental impact assessments under Commonwealth, state or territory legislation

If you have identified that the proposed action will be or has been subject to a state or territory environmental impact statement (in section 1.11) you must complete this section. Describe any environmental assessment of the relevant impacts of the project that has been, is being, or will be carried out under state or territory legislation. Specify the type and nature of the assessment, the relevant legislation and the current status of any assessments or approvals. Where possible, provide contact details for the state/territory assessment contact officer.

Describe or summarise any public consultation undertaken, or to be undertaken, during the assessment. Attach copies of relevant assessment documentation and outcomes of public consultations (if available).

Jemena has completed a desktop assessment of ecological values and potential impacts along the pipeline route. This Referral is, in part, based on this information.

Both Queensland and the Northern Territory have processes to assess the environmental impacts of this action. Jemena has commenced the environmental approvals process in both Queensland and the Northern Territory. The approvals process for each jurisdiction is outlined below.

Northern Territory:

- A Pipeline Permit was submitted to the NT Department of Mines and Energy for the purposes of geotechnical survey the route.
- Pursuant to the NT *Environmental Assessment Act* (EA Act) & *Environmental Assessment Administrative Procedures* (EAAP) a Notice of Intent (NOI) is currently being prepared to be submitted to the NT Environment Protection Authority (NTEPA). The NOI is the formal notification to the NTEPA of the project and starts the NT assessment process.
- It is expected that the NTEPA will require that the project is assessed as either an Environmental Impact Statement (EIS) or a Public Environmental Report (PER).

Discussions regarding environmental approvals for this project in the Northern Territory have included:

Department of Mines and Energy
Gibson Porkme gibson.porkme@nt.gov.au

NT Environment Protection Authority
Roderick Johnson Roderick.Johnson@nt.gov.au

Queensland:

- A Pipeline Survey Licence (PSL) and associated Environmental Authority (EA) has been to the Qld government for the purposes of surveying the Queensland section of the NEGI pipeline; the EA for the PSL was approved on 14 July 2015.

- The proposed action does not meet any of the criteria for the project to be declared an EIS in Qld and, after discussion with the Qld government Departments of Environmental and Heritage Protection (DEHP) and Natural Resource Management a Pipeline Licence and associated Environmental Authority (EA) will be submitted in August 2015.
- It is expected that the EA will be conditionally granted within 2 calendar months of submission.

Discussions regarding environmental approvals for this project in Queensland have included:

Department of Environment and Heritage Protection

- Kylie Breaker Kylie.Breaker@ehp.qld.gov.au (phone conference 3rd July 2015, face-to-face in Brisbane on the 7th July)
- Kim Shaw, Manager (Assessment), Kim.SHAW@ehp.qld.gov.au (phone conference 3rd July 2015)
- Philip Rowland, Manager, EIA Petroleum, Gas and Agriculture, Philip.Rowland@ehp.qld.gov.au (face to face meeting Brisbane 16th June 2015)
- Carole Rayner, Principal Impact Assessment Officer (Biodiversity), Carole.Rayner@ehp.qld.gov.au (face to face meeting Brisbane 16th June 2015)

Office of the Coordinator General

Steven Tarte, Project Manager, Coordinated Project Delivery, Steven.Tarte@coordinatorgeneral.qld.gov.au (face to face meeting Brisbane 16th June 2015)

Department of Natural Resources and Mines

John McCormack Registrar – Petroleum and Gas john.mccormack@dnrm.qld.com.au (face-to-face 8th July 2015)

Department of State Development

- Karen Wiik, Director, Industry Case Managers, Industry Development karen.wiik@dsd.qld.gov.au
- Isabelle Gabas, Industry Case Manager, Industry Development Isabelle.Gabas@dsd.qld.gov.au

2.6 Public consultation (including with Indigenous stakeholders)

Your referral must include a description of any public consultation that has been, or is being, undertaken. Where Indigenous stakeholders are likely to be affected by your proposed action, your referral should describe any consultations undertaken with Indigenous stakeholders. Identify the relevant stakeholders and the status of consultations at the time of the referral. Where appropriate include copies of documents recording the outcomes of any consultations.

Jemena has commenced a public consultation with both the business community and the general public, undertaking project briefings in Darwin, Alice Springs, Tennant Creek and Mount Isa. In addition, Community Open Houses were held in Tennant Creek, Camooweal and Mount Isa. This engagement will continue throughout the project.

All consultation, without exception, has been very well received and the co-operation received has been excellent. Jemena believe the effort to consult thoroughly with the public and the continued efforts to do so have set the foundations for positive relations for the remainder of the project.

Jemena is undertaking a broad public consultation program targeting a range of key stakeholders including;

- Landholders & Occupiers
- Local Government Authorities
- State and Territory Government Authorities
- Road Authorities
- Rail Authorities
- Mining & Petroleum Tenement Holders

- Easement Holders
- Native Title Claimants
- Indigenous Landholders

Landholder consultation

All landholders and occupiers directly or indirectly impacted by the proposed alignment have been consulted with and where possible, face to face meetings have been held (on a number of occasions in some cases). Landholders and occupiers have been provided with an overview of Jemena, the NEGI Project and a briefing on the timeframes and process moving forward. The proposed alignment together with access tracks, station locations and other features of the project have been discussed with landholders and occupiers also. Input has been provided from these key stakeholders and the alignment altered in some instances taking account of the feedback obtained. Where applicable, Jemena have entered into access agreements with landholders to access land for survey purposes. Comprehensive records of all discussions, communications and correspondence have been maintained throughout the consultation program.

Aboriginal Representative Bodies, Aboriginal Landowners and Native Title Holders

The proposed pipeline traverses land on which a range of known Aboriginal interests exist. These interests are set out in the table below:

KP	Tenure Type & Aboriginal Interests	Representative Body
0-38	Pastoral Lease with Native Title claim. Phillips Creek Native Title Claim (DC2014/009)	Central Land Council (CLC).
39-63	Aboriginal Land. Warrumungu Aboriginal Land Trust.	CLC.
173 - 193	Pastoral Lease with native title claim. Dalmore Downs Native Title Claim (DC2001/030).	Northern Land Council (NLC)
194-213	Pastoral Lease with native title claim. Dalmore Downs South Native Title Claim (DC2002/002).	NLC
213-262	Aboriginal Land. Wakaya Aboriginal Land Trust.	CLC
262-305	NT Enhanced Aboriginal Freehold held by the Arruwurra Aboriginal Corporation (AAC).	AAC
306-313	Pastoral Lease with native title claim. Dalmore Downs Native Title Claim (DC2001/030).	NLC
314-343	NT Enhanced Aboriginal Freehold held by the Arruwarra Aboriginal Corporation.	AAC
344-457	Pastoral Lease with native title claim. Burrumurra Native Title Claim (DC2002/0152).	NLC
458-565	Determined native title over pastoral lease. Indjalandji-Dhidhanu Native Title Prescribed Body Corporate (PBC) (IDAC)	IDAC
606-622	Determined native title over pastoral lease. Kalkadoon Native Title Prescribed Body Corporate (PBC) Aboriginal Corporation (KNTAC)	KNTAC

The relevant legislation for approvals for the project relating to Aboriginal interests includes:

1. *Aboriginal Land Rights (Northern Territory) Act 1976 (Cth) (ALRA)*
2. *Native Title Act 1993 (Cth) (NTA)*

3. *Aboriginal Land Act (NT) (ALA)*
4. *Northern Territory Aboriginal Sacred Sites Act 1978 (NT) (ASSA)*
5. *Heritage Act 2011 (NT) (HA)*
6. *Aboriginal Cultural Heritage Act 2003 (Qld) (ACHA)*

Commencing in early June 2015 Jemena engaged in consultations with the Central and Northern Land Council, the Indjalandji-Dhidhanu Aboriginal Corporation and the Kalkadoon Native Title Aboriginal Corporation. More recently in July 2015, Jemena commenced consultations with the Arruwurra Aboriginal Corporation (AAC) after being advised that this organisation wished to deal directly with Jemena, rather than through the CLC.

Throughout June and July a number of meetings, telephone discussions and communications have occurred between the Jemena and the Aboriginal parties. The subject of discussions to date has been associated with putting in place:

1. Two-way confidentiality agreements – to protect each other's interests during the NEGI competitive phase.
2. Land access for geotechnical surveys and the protection of cultural heritage values.
3. Cultural Heritage Survey Agreements for full cultural heritage surveys during the Planning Phase.

At the time of this referral, the status of the discussions is summarised as follows:

#	Agreement Type	Aboriginal Organisation / Status of Agreement Making				
		CLC	NLC	AAC	IDAC	KNTAC
1	Confidentiality agreement	Y	Y	Y		
2	Geotechnical surveys access.	Y		Y		
3	Heritage Survey Agreement	Y				

Discussions with these Aboriginal stakeholders have been both positive and constructive and arrangements are well underway for the conduct of full cultural heritage surveys and short and long term access to land should Jemena be appointed as the Successful Proponent to build, own and operate the NEGI Project pipeline. When this occurs, Jemena will commence more substantive discussions with the Aboriginal parties including through the development of an Economic and Social Impact Assessment (ESIA) for inclusion with the relevant environmental approvals.

Business and general community stakeholders

Jemena's normal practice for projects is to engage with identified stakeholders including the wider community and the approach taken for the NEGI Project is consistent with this. During the week commencing 20 July 2015, Jemena undertook a regional roadshow to engage with the both the business community and the community more broadly in the regional towns where the project will be located.

The following table summarises the consultation events:

Event	Location / # people attending / inquiring				
	Darwin	Alice Springs	Tennant Creek	Camooweal	Mount Isa
Business Briefings	210	38	19	x	64
Community Open Houses	n/a	na* see note below	31	16	17

Business Briefings

Business stakeholders from Camooweal attended the Mount Isa event. The purpose of the road show was firstly to introduce Jemena and its main construction contractor, McConnell Dowell, to stakeholders in the Northern Territory and specifically to the Barkly and Mount Isa regions where the project will be located. The second and equally important purpose was to begin to gauge the level of capacity that exists in the regions to

support the project and to commence Jemena's understanding of any concerns and aspirations about the project within the associated communities.

The business briefings on the road show included presentations from:

- Jemena;
- McConnell Dowell;
- the ICN NT and Queensland;
- Indigenous Business Network NT (Darwin only);
- AusIndustry, regarding the Entrepreneurs Infrastructure Programme;
- the Department of Education and Training, regarding the Industry Skills Fund;
- the NT Department of Business (Darwin excepted); and,
- the Queensland Department of State Development (Mount Isa).

Each business session was ended with a closing address from the Chamber of Commerce NT (in the NT) and Commerce North West (Mount Isa).

In summary the business briefings were very useful for both Jemena and the participants and allowed for a significant amount of information sharing and contacts for future discussions to be made.

Community Open House Sessions

The Community Open houses were run in Tennant Creek at the local Food Barn; Camooweal at the Town Hall and Hotel; and at Mount Isa at the Kmart Plaza. These comprised setting up a small display to disseminate information about the project and to talk to people in the communities about who Jemena is and what their involvement in the project is.

Since Jemena commenced involvement in the NEGI Project it has prepared and disseminated two Project Newsletters to stakeholders in the NT and Mount Isa area. Pictorial booklets about the process for pipeline construction and operations were also disseminated. These publications are attached for reference.

While running the Alice Springs business session at the Central Australian Development Office a small protest led by the *Central Australian Frack Free Alliance* was held outside the building. In a non-confrontational way Jemena approached and discussed the NEGI project with the group. Many questions asked by the Alliance were answered and copies of the Jemena NEGI Project Newsletter were provided. The Alliance now has the relevant Jemena contacts and is included on the Jemena stakeholder database for future consultation.

At all Community Open House sessions Jemena engaged with a cross section of local communities, Indigenous and non-Indigenous.

The matters of interest raised by the people encountered were varied and included:

- the job opportunities that might be available on the project, for women as well as men;
- where the pipeline would be located in relation to traditional Aboriginal country;
- the need for Jemena to work to understand the local culture in order to ensure successful local participation in the project;
- the opportunities available for local businesses; and,
- the construction method particularly in the different ground types common in the region.

A NEGI Project inquiry email has been established for stakeholders to contact Jemena and a number of inquiries about the project have started to be received through this avenue.

Future Consultations and Engagement

Throughout the engagement referred to above Jemena gathered a large amount of information that will be very useful in future consultations and engagement.

Jemena recognises that the consultation activities undertaken to date are just the beginning of the process and that as time moves on then there will no doubt be more matters raised as stakeholders become more involved in the process, particularly through consultations associated with the Economic and Social Impact Assessment.

Other stakeholder engagement

Jemena have also met representatives of the two local government authorities and provided a briefing to each on the project. Similarly, meetings have been held with the relevant state and territory government authorities to discuss the project in their capacity as landholders and custodians of the land in some cases or as the authority

administering land tenure. These meetings have been invaluable in gathering important information relevant to the overall land access strategy.

State road authorities have been consulted to discuss specifications relevant to the crossing of state owned and controlled roads as well as discussions around use of roads for transport and logistics required for a project of this magnitude.

The project also intersects a rail corridor accommodating the Adelaide to Darwin railway. Meetings have been held with the CEO of the railway owner, AustralAsia Railway Corporation and a briefing provided and specific requirements gathered. Operators of the rail corridor, Genesee and Wyoming have also been consulted as has NextGen who own and operate cable infrastructure within the rail corridor.

Importantly, and particularly around Mount Isa, Jemena have consulted with mining and resource tenement holders directly impacted by the NEGI Project. Jemena have met with representatives of Mount Isa Mines and provided a project briefing and discussed possible sub-leases of their mining lease to locate end of line facilities.

Any parties holding a registered easement have been provided with information pertaining to the project and been provided with an opportunity for comment.

2.7 A staged development or component of a larger project

If you have identified that the proposed action is a component of a larger action (in section 1.12) you must complete this section. Provide information about the larger action and details of any interdependency between the stages/components and the larger action. You may also provide justification as to why you believe it is reasonable for the referred action to be considered separately from the larger proposal (eg. the referred action is 'stand-alone' and viable in its own right, there are separate responsibilities for component actions or approvals have been split in a similar way at the state or local government levels).

N/A

3 Description of environment & likely impacts

3.1 Matters of national environmental significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The interactive map tool can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest.

Your assessment of likely impacts should refer to the following resources (available from the Department's web site):

- specific values of individual World Heritage properties and National Heritage places and the ecological character of Ramsar wetlands;
- profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;
- *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance*; and
- associated sectoral and species policy statements available on the web site, as relevant.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The Minister has prepared four marine bioregional plans (MBP) in accordance with section 176. It is likely that the MBP's will be more commonly relevant where listed threatened species, listed migratory species or a Commonwealth marine area is considered.

Note that even if your proposal will not be taken in a World Heritage area, Ramsar wetland, Commonwealth marine area, the Great Barrier Reef Marine Park or on Commonwealth land, it could still impact upon these areas (for example, through downstream impacts). Consideration of likely impacts should include both direct and indirect impacts.

3.1 (a) World Heritage Properties

Description

There are no world heritage places within a 50 km buffer of the proposed NEGI pipeline alignment and the pipeline corridor does not occur upstream of any world heritage properties.

Nature and extent of likely impact

Consequently, this development will not affect these areas

3.1 (b) National Heritage Places

Description

There are no national heritage places within a 50 km buffer of the proposed NEGI pipeline alignment.

Nature and extent of likely impact

Consequently, this development will not affect these areas.

3.1 (c) Wetlands of International Importance (declared Ramsar wetlands)

Description

There are no wetlands of international importance within the project area nor do any rivers that intersect the pipeline flow into any Ramsar wetland.

Nature and extent of likely impact

Consequently, this development will not affect these areas.

3.1 (d) Listed threatened species and ecological communities

Description

The EPBC Protected Matters Search Tool (PMST) was used to generate a list of Commonwealth listed threatened species that may, are likely or known to occur within a 50 km buffer area around the proposed pipeline alignment (see Appendix B). The likelihood of each species occurring within the 20 km pipeline Planning Corridor was then determined using the scientific literature and desktop information of species distribution and habitat requirements (see Appendix C for detailed methods and results of this analysis). The PMST returned no Threatened Ecological Communities within the 50 km buffer.

The analysis in Appendix C categorised the PMST threatened species into either likely or unlikely as summarised in Table 8. Only four threatened species are 'Likely' to occur within the pipeline Planning Corridor. The potential impacts to each of those species are addressed in the sections below. Species that were determined unlikely to occur within the Planning Corridor were excluded from further analysis.

Table 8. Summary of threatened species likelihood analysis

Likelihood from our analysis	Common name	Scientific name	PMST likelihood	EPBC status
Likely	Gouldian Finch	<i>Erythrura gouldiae</i>	Known	EN
	Carpentarian Antechinus	<i>Pseudantechinus mimulus</i>	Known	VU
	Masked Owl (Northern)	<i>Tyto novaehollandiae kimberli</i>	Known	VU
	Plains Death Adder	<i>Acanthophis hawkei</i>	Known	VU
Unlikely	Red Goshawk	<i>Erythrotriorchis radiata</i>	May	VU
	Night Parrot	<i>Pezoporus occidentalis</i>	Likely	EN
	Australian Painted Snipe	<i>Rostratula australis</i>	Likely	EN
	Greater Bilby	<i>Macrotis lagotis</i>	Known	VU
	Southern Marsupial Mole	<i>Notoryctes typhlops</i>	Likely	EN
	Black-footed Rock-wallaby (MacDonald Ranges Race)	<i>Petrogale lateralis (MacDonald Ranges Race)</i>	May	VU
	Gulf Snapping Turtle	<i>Elseya lavarackorum</i>	Known	EN
	Great Desert Skink	<i>Liopholis kintorei</i>	May	VU
	Freshwater Sawfish	<i>Pristis pristis</i>	Likely	VU

Status: EN = Endangered, VU = Vulnerable,
PMST likelihood: Known = species or species habitat known to occur within area, Likely = species or species habitat likely to occur within area, May = species or species habitat may occur within area; from Protected Matters Search Tool output, Appendix B

Nature and extent of likely impact

Gouldian Finch (*Erythrura gouldiae*)

The Gouldian Finch is found in woodland of *Eucalyptus* trees especially *E. tintinnans*, *E. brevifolia* and *E. leucophloia*, which typically occur amongst rocky hills. Where there is suitable *Eucalyptus* spp. present for nesting the Gouldian Finch also requires annual and perennial grasses, especially *Sorghum*, in the surrounding landscape but has also been observed to occur in woodland with the grasses *Chrysopogon fallax*, *Triodia bitextura* and *Alloteropsis semialata* (DOE 2015). The species also requires access to a water source. The Gouldian Finch appears to be a resident and probably largely sedentary species that disperses from breeding areas to nearby sites (up to about 20 km away) during the wet season in response to local changes in the availability of food (DOE 2015).

Within the Northern Territory section of the Planning Corridor, vegetation consists of grasslands over black soil

plains, shrubland and eucalyptus open woodland. The low open woodland vegetation is the only potential habitat within the Planning Corridor for the Gouldian Finch however this is outside the range of the species. Given that the only potential habitat for the species in the Northern Territory is outside of the species range it is highly unlikely that the Gouldian Finch will be found in within the Northern Territory section of the Planning Corridor.

Regional Ecosystems (RE) are mapped by the Queensland government and provide information that can be used to broadly assess for the presence of preferred habitat types in the areas where Gouldian Finch could occur. Small sections of pipeline west of Mount Isa passes through RE which contain *Eucalyptus leucophloia*, *E. tintinnans* or *E. brevifolia*, which are the preferred nesting tree species for Gouldian Finches (Figure 3, Figure 4). Although no RE within the Planning Corridor are characterised by the presence of the species' preferred food source, *Sorghum* spp., there are RE that contain *Triodia* spp. and *Chrysopogon* spp in the understorey which could potentially be utilised by the species.

In Queensland, records of the species have been unpredictable and records of the species have not reoccurred from the same location (O'Malley 2006). Additionally, there are no recent breeding records from anywhere within Queensland (Garnett et al. 2011). There are very few records of the species from within the region; one record from east of Lake Moondarra and another from Lady Loretta Mine Road approximately 50 km north of the proposed alignment (These are the closest two records to the pipeline alignment shown in Figure 4). Given the scarcity of records and the lack of ideal habitat, the Planning Corridor is not core habitat for the species. However, based on this broad habitat information and the existence of a few recent Gouldian Finch sightings from the area around Mount Isa, the potential presence of habitats utilised by the species cannot be discounted until biological surveys are completed in 2016.

If field surveys indicate that the Gouldian Finch does, or is likely to, breed within habitats traversed by the pipeline corridor it is still unlikely that this development will significantly affect the species as the impact corridor is narrow (30 m), the length of habitat intersected by the pipeline is 28.28 km (84.84 ha), the habitat is sparse trees (thus only a few trees, if any, will be impacted) and construction will be during the dry season which is outside the breeding season for the species (which is when they would use this woodland habitat). Affected areas of nesting habitat (maximum 85 ha) comprise a small section of potential nesting habitat within the Planning Corridor (49,431 ha); as such disturbance associated with pipeline construction activities is unlikely to impact on the Gouldian Finch population.

Disturbance of potential dry season feeding habitats in the lowland areas is less likely to impact on any regional population (if present) as the disturbance will be confined to a 30 m wide corridor and the construction process from vegetation clearing to re-instatement will occur over a single season. Whilst the birds may avoid feeding in close proximity to the construction activities, it is not expected that the disturbance will substantially restrict the use of feeding areas more broadly. On completion of construction the pipeline corridor will be rehabilitated with soil returned to the trench and topsoil, previously stockpiled, spread back over the site to promote regeneration of the grass species. Whilst mature trees present within the 30 m footprint will be removed, the absence of these trees is unlikely to affect the species utilisation of the area, as the species is frequently observed nearby previously disturbed areas such as roads, borrow pits and dams (Welch pers. comm. 2015).

Apart from habitat alteration the main threats to the Gouldian Finch are altered fire regimes, aviculture and parasites (DOE 2015). Although the project will not directly alter fire regimes there is the potential for indirect alteration due to the introduction of weeds. Weeds have the potential to both increase and decrease the frequency of fire within a landscape. An increase in fire regimes is a potential threat to the Gouldian Finch which could be caused by the introduction of weed species to the area. In order to avoid and minimize the establishment of weeds along the pipeline footprint, the area will be progressively backfilled and levelled with local topsoil to encourage the establishment of native grasses. To avoid the transport of weeds to the site through construction activities a weed management plan will be developed. General procedures for weed prevention include vehicle wash-down/blow down stations at each property boundary as well as state borders and heads of access roads. The weed management plan will be tailored to meet the environmental objectives and management measures outlined in the APA Code of Environmental Practice for Onshore Pipelines (APIA 2013). Following the industry best practice for weed management it is expected that the introduction of weeds will be minimized and thus fire regimes will not be significantly altered along the pipeline corridor. The parasite *Sternostoma tracheacolum* may have a negative effect on the Gouldian Finch. This is thought to increase during times of food stress. The small area of disturbance will have little impact on food availability and is thus unlikely to increase the instance (or

spread) of parasite infection.

Carpentarian Antechinus (*Pseudantechinus mimulus*)

Within the Northern Territory the Carpentarian Antechinus is only known from the Sir Edward Pellew group of Islands (Kitchener 1991; Johnson & Kerle 1991; Taylor et al. 2004) and is not distributed within the Planning Corridor. In Queensland the species is only known from around Mount Isa (Woinarski 2004). There are no records of the species within the 20 km Planning Corridor, but likely and possible distribution of the species (see Figure 5) is intersected by the Planning Corridor. Carpentarian Antechinus has a mainland range restricted to the areas around Mount Isa. The few records of this species show a preference for the rocky hills habitat that occurs in this area. Within Queensland, the records come from rocky habitat with open woodland dominated by *Eucalyptus leucophloia*, *E. normantonensis* and *Corymbia terminalis*. The sandstone hills and boulders to the west of Mount Isa within the Planning Corridor potentially constitute suitable habitat for the species. Little is known about microhabitat requirements for the species; however, breeding is thought to occur during a short period between August and October (DOE 2015).

There are no records of the species within the Planning Corridor. There are three records in the vicinity of Mount Isa within the ALA database (ALA, 2015) (Figure 5). Given the distribution of the species, and the presence of potential habitat, it is assumed that this species may occur in the rocky hill areas that will be traversed by approximately 15 km of the proposed pipeline west of Mount Isa. Whilst rocky hills will be avoided where at all possible in final route selection due to the high cost of construction; this is unavoidable near Mt. Isa so some small sections of the pipeline will traverse rocky areas. The presence / absence of the preferred Carpentarian Antechinus habitats in the areas traversed by the pipeline alignment will be determined during the field surveys in 2016.

Pipeline construction could have a direct impact on the species if construction occurs through inhabited areas. Construction activities are unlikely to result in the death of individuals sheltering in rock-crevices or inadvertently captured in the open trench subject to the implementation of effective mitigation measures during construction (Section 4). Construction (clearing and blasting) through rocky areas will create noise and vibration; which could cause the Carpentarian Antechinus (if present) to avoid using the areas over the construction period. As the potentially impacted habitats occur contiguously with other suitable habitat areas, it is expected that the species could readily utilise habitats outside of the construction corridor in the short-term. The removal of trees within the 30 m wide corridor is not expected to cause long-term change to habitat suitability; and reinstatement with native grasses should ensure the corridor does not provide a barrier to movement or dispersal of the species.

The threats to the Carpentarian Antechinus are largely unknown; however, potential threats include feral cats, increased fire regimes impacting on prey, and Buffel grass invasion (DOE 2015). Feral cats are already distributed throughout Australia (DOE 2004) including the entire Planning Corridor. The pipeline will be a linear disturbance and construction will be for a short period. This is unlikely to increase the abundance of feral cats within the area.

Buffel Grass (*Cenchrus ciliaris*) is a potential weed species within the Mount Isa Inlier Bioregion and is well established in the area (AVH 2015). The continued invasion of the species may pose a threatening process to the Carpentarian Antechinus through increasing fire frequency along ridgelines where the grass has invaded. Construction activities and vehicle transport along the pipeline corridor have the potential to spread Buffel Grass and thus impact the ecology of the area where the species occurs. In order to avoid and minimize the establishment of weeds along the pipeline footprint, the area will be progressively backfilled and levelled with local topsoil to encourage the establishment of native grasses. To avoid the transport of weeds to the site through construction activities a weed management plan will be developed. General procedures for weed prevention include vehicle wash-down/blow down stations at each property boundary as well as state borders and heads of access roads. The weed management plan will be tailored to meet the environmental objectives and management measures outlined in the APA Code of Environmental Practice for Onshore Pipelines (APIA, 2013). Following the industry best practice for weed management it is expected that the introduction and spread of weeds will be minimized along the pipeline corridor.

Masked Owl (Northern) (*Tyto novaehollandiae kimberli*)

The Masked Owl (Northern) occurs sparsely within its broad range across northern Australia. Its general distribution is well north of the Planning Corridor. Despite the Planning Corridor being south of the species commonly accepted range, there is a single isolated record of the species from south of the Planning Corridor. The record is within the search area and is located north of Alpururulam.

The species prefers tall open *Eucalyptus* forests and will forage in more open vegetation types including grasslands (Woinarski and Ward 2006). Tall open *Eucalyptus* woodland is not a dominant vegetation community of the Planning Corridor; low open woodland, shrubland or grassland is more common; which constitute potential foraging habitat for the species. The Masked Owl is broad ranging with pairs having large home ranges (DOE 2015); nests occur 7 to 8 km apart. Other subspecies of Masked Owl have home ranges of 5 to 10 km² (Kavanagh and Murray 1996).

Given the large home range, temporary disturbance caused by pipeline construction activities over a single dry season is not expected to affect the survivability of any pairs whose home range is traversed. Considering a square home range of 500 ha (5 km²) and allowing for a 30 m wide pipeline footprint pipeline construction activities would disturb approximately 9 ha (or 1.8 %) of the potential home range. Noise and vibration may cause the species to avoid utilising areas within close proximity to the construction corridor for a short period of time due to prey species for the Masked Owl temporarily avoiding using these habitats (although small rodents such as mice may prefer disturbed soil and regularly frequent the site). The broader availability of foraging habitats in the surrounding areas should provide for the species habitat requirements in the short-term. As indicated above, the presence of suitable nesting habitats is expected to be limited by the minor extent of tall open *Eucalyptus* woodland and therefore impacts to nesting birds are considered unlikely.

The threats to the Masked Owl are largely unknown but it is thought to be affected by changing fire regimes, grazing livestock and the introduction of pasture grasses (DOE 2015); all of which have caused a decline in the small mammal population across northern and central Australia. This reduction in the small mammal population has reduced the potential food source of the Masked Owl. The project will not directly modify fire regimes however there may be indirect impacts to fire regimes (and direct impacts to mammal populations) through the introduction and/or spread of weeds within the Planning Corridor. In order to avoid and minimize the establishment of weeds along the pipeline footprint, the area will be progressively backfilled and levelled with local topsoil to encourage the establishment of native grasses. To avoid the transport of weeds to the site through construction activities a weed management plan will be developed. General procedures for weed prevention include vehicle wash-down/blow down stations at each property boundary as well as state borders and heads of access roads. The weed management plan will be tailored to meet the environmental objectives and management measures outlined in the APA Code of Environmental Practice for Onshore Pipelines (APIA, 2013). Following the industry best practice for weed management it is expected that the introduction and spread of weeds will be minimized and thus fire regimes will not be significantly altered along the pipeline corridor.

Reducing numbers of hollow bearing trees could also potentially affect the species; such trees are used for roosting and breeding. Although not typical of the vegetation within the Planning Corridor large hollow bearing trees are likely to be scattered across certain sections of the pipeline. Although not always possible, where possible the final alignment of the pipeline will avoid large hollow bearing trees. As it may not always be possible to avoid large hollow bearing trees consideration need to be given to the potential impact of removing these trees.

Information of the number of hollows per hectare of woodland within the Planning Corridor is not known however there have been estimates made of other woodland communities which can give a general idea of tree hollow numbers. Relatively high densities of hollows were found within *E. miniata* and *E. tetradonta* woodland where mean density of hollows greater than five centimetres in diameter was 68 per hectare (Woinarski & Westaway 2008). This may be an overestimation for *Eucalyptus* communities within the Planning Corridor as the woodlands from Woinarski and Westaway's study were in higher rainfall areas of the Northern Territory. An alternate estimate found densities of tree hollows to be 7-17 per hectare (including small hollows) within undisturbed woodland communities (Gibbons & Lindenmayer 2002). Considering the previously determined area of disturbance (9 ha) the maximum number of hollow bearing trees would be 153 per 5 ha home range. This is a small proportion of the total 8500 hollow bearing trees per 5 ha home range. This small disturbance is not expected to have a significant impact on the species.

Plains Death Adder (*Acanthophis hawkei*)

The Plains Death Adder occurs sporadically across mainland northern Australia; it is known from floodplains of the Adelaide, Mary and Alligator Rivers as well as the Barkly Tableland on the Northern Territory (NT)/Queensland (QLD) border. There is a single record within the search area from 1978 of the Plains Death Adder occurring on tussock grasslands near Avon Downs (Figure 6). The species occurs on floodplains and cracking clay soil plains (vertisols) (Webb et al. 2002) which are distributed through the eastern section of the Planning Corridor and extend northwards across the Barkly Tablelands. This area contains a number of old records from outside the Planning Corridor north of the Barkly Highway.

The advance of Cane Toads is the greatest threat facing the species (Ward and Phillips 2012). The current distribution of toads encompasses the entire black soil plains habitat in the Planning Corridor through which the Plains Death Adder could potentially be found (DOE 2010). The Cane Toad requires wet conditions for survival and the distribution is restricted by climate conditions in the central and southern portions of Australia. Creation of new permanent water sources that persist through the dry season (which then become inhabited by Cane Toads) could have a potential impact on the Plains Death Adder by providing suitable (and more permanent) conditions for Cane Toads. There is not to be creating any permanent or large inundated areas that could be used by the Cane Toad.

Any impact on the species is unlikely; no further impact mitigation measures have been detailed for this species.

EHP RTI DL Release

3.1 (e) Listed migratory species

Description

Within the project area and its surrounds, the EPBC Act Protected Matters Search Report (Appendix B) lists 19 migratory species that were not also listed as threatened species. One species, the Australian Painted Snipe (*Rostratula australis*) is listed as 'Endangered' under the EPBC Act and is discussed in the threatened species section above. All migratory species are birds and can be broadly grouped into two groups; non-shorebird species (eight species) and shorebird species (11 species).

The likelihood of each migratory species occurring within the 20 km pipeline Planning Corridor was determined using the scientific literature and desktop information of species distribution and habitat requirements (see Appendix D for detailed methods and results of this analysis).

The analysis in Appendix D categorised the PMST migratory species into either likely or unlikely as summarised in Table 9. Only six non-shorebird species emerge as either 'Known' or 'Likely' to occur within the Planning Corridor.

That analysis determined that no migratory shorebird species were likely to occur within the 20 km Planning Corridor due to the absence of suitable habitat Figure 7 in Appendix A).

The potential impacts to the migratory species 'Known' or 'Likely' to occur are discussed below; it is unlikely that any of these migratory species will be impacted by the pipeline alignment.

Table 9. Summary of migratory (non-shorebird) species analysis

Likelihood from our analysis	Common name	Scientific name	PMST likelihood
Known	Rainbow Bee-eater	<i>Merops ornatus</i>	May
	Great Egret	<i>Ardea alba</i>	Known
	Cattle Egret	<i>Ardea ibis</i>	May
Likely	Fork-tailed Swift	<i>Apus pacificus</i>	Likely
	Oriental Plover	<i>Charadrius veredus</i>	Known
	Oriental Pratincole	<i>Glareola maldivarum</i>	Known
Unlikely	White Bellied Sea Eagle	<i>Haliaeetus leucogaster</i>	Known
	Eastern Osprey	<i>Pandion cristatus</i>	Known
Key PMST likelihood: Known = species or species habitat known to occur within area, Likely = species or species habitat likely to occur within area, May = species or species habitat may occur within area.			

Table 10. Summary of migratory (shorebird) species analysis

Likelihood from our analysis	Common name	Scientific name	PMST likelihood
Unlikely	Sharp-tailed Sandpiper	<i>Calidris acuminata</i>	Known
	Curlew Sandpiper	<i>Calidris ferruginea</i>	Known
	Wood Sandpiper	<i>Tringa glareola</i>	Known
	Marsh Sandpiper	<i>Tringa stagnatilis</i>	Known
	Red-necked Stint	<i>Calidris ruficollis</i>	Known
	Black-tailed Godwit	<i>Limosa limosa</i>	Known
	Little Curlew	<i>Numenius minutus</i>	Known
	Pacific Golden Plover	<i>Pluvialis fulva</i>	Known
	Lesser Sand Plover	<i>Charadrius mongolus</i>	Known
	Bar-tailed Godwit	<i>Limosa lapponica</i>	Known
	Whimbrel	<i>Numenius phaeopus</i>	Known
Key PMST likelihood: Known = species or species habitat known to occur within area			

Nature and extent of likely impact

Fork-tailed swift (*Apus pacificus*)

Fork tailed Swift is an exclusively aerial species that feeds by catching insects on the wing. Given its wide distribution and high motility it is likely that the species will be forage in the sky above the Planning Corridor. Given its aerial nature it is highly unlikely that the species would be impacted by the proposed pipeline development.

There are no known threatening processes documented for this species. As mentioned previously it is solely an aerial species within Australia and is unlikely to be impacted by the proposed pipeline alignment.

Rainbow Bee-eater (*Merops ornatus*)

The Rainbow Bee-eater is a widely distributed species that uses a range of habitat types, including woodlands, shrublands, and various cleared and semi-cleared habitats (Simpson and Day 2004). It is likely that some of the vegetation communities within the Planning Corridor constitute suitable foraging habitat for the Rainbow Bee-eater. Nesting burrows are created in the banks of creeks, rivers, dams, gravel pits, and in cliffs.

There are no specific threats to this species in Australia or elsewhere in the world. The proposed pipeline alignment will have a narrow footprint. This footprint will clear a small section of each representative habitat within the Planning Corridor that has the potential to be used by the Rainbow Bee-eater. Each vegetation community affected by construction of the proposed pipeline alignment is well represented outside of the footprint area. The areas will only be disturbed for a short period during pipeline construction, after which will be rehabilitated. Given the range of habitats occupied by the Rainbow Bee-eater, including cleared and semi-cleared areas, it is expected that this development will have no impact on the species.

Oriental Plover (*Charadrius veredus*)

The species has a wide distribution and uses a range of habitat types. After spending time on coastal flats, the Oriental Plover moves inland and inhabits flat, open, dry grasslands where there is bare ground such as clay pans, recently burnt areas, or playing fields etc. Whilst in Australia the species does not maintain territories or home ranges (DOE 2015).

There are no specific threats to this species (Marchant & Higgins 1993). Destruction or modification of large areas of grasslands could impact the species. Given the linear nature of the pipeline development only a small area will be disturbed within large areas of contiguous grassland. This is not expected to impact the feeding ability of the species. Birds may avoid the pipeline footprint and surrounds during construction activities due to increased noise and/or dust however given the contiguous nature of the grasslands and ability of the birds to move (given the lack of home ranges and territories) avoidance of this area is not expected to impact the Oriental Plover. Thus it is expected that this development will have no impact on the species.

Oriental Pratincole (*Glareola maldivarum*)

The species is distributed across the north west of Australia during the non-breeding season (October – March) and before moving to south east Asia for the breeding period. The species uses a broad range of grasslands and flat plains with sparse grass cover and open space.

Although the species is likely to be found within the Planning Corridor the timing of the species residence within Australia makes it highly unlikely that it will be impacted by planning or construction of the proposed pipeline. Pipeline planning and construction will occur during the northern Australia dry season (April – October), during which time there will be no Oriental Pratincole within the Planning Corridor.

Destruction or modification of large areas of grasslands could impact the species. Given the linear nature of the pipeline development only a small area will be disturbed within large areas of contiguous grassland. This is not expected to impact the feeding ability of the species. Birds may avoid the pipeline footprint and surrounds during construction activities due to increased noise and/or dust however given the contiguous nature of the grasslands and ability of the birds to move (given the lack of home ranges) avoidance of this area is not expected to impact the Oriental Plover. Thus it is expected that this development will have no impact on the species.

Egret spp. (*Ardea alba* & *Ardea ibis*),

These species are widespread across Australia, individuals of the species occupy large areas and utilise a variety of inundated areas without strong preference for vegetation type. In some areas the species is considered a pest and

is actively removed from certain locations through trapping, shooting and netting.

The main threat associated with pipeline construction activities would be the destruction or degradation of habitat. The pipeline alignment will disturb riparian edges for a short period of time. The disturbance will happen during the dry season when watercourses in the area are dry and not being utilised by these species. The area of disturbance will be progressively rehabilitated and it is not expected to impact the species.

The Planning Corridor does not include any internationally important wetlands or wetlands of national significance. The black soil plains area at the southern-most extent of the Barkly tablelands region will contain inundated areas during the wet season which is outside of construction times. These areas may be used by both Egret species however given the linear nature of the proposed pipeline construction activities will only cause a small area of disturbance within the large contiguous areas of potentially inundated plains. These areas will be disturbed during the dry season and progressively rehabilitated to the same contours and revegetated using the soil seed bank.

Lake Moondarra is the only important wetland habitat area for these species which is approximately 20 km north-east of the pipeline alignment and will not be intersected by the pipeline alignment meaning there is no direct impact to fringing vegetation. The proposed alignment does intersect streams that feed Lake Moondarra; increased sedimentation in these streams has the potential to impact on the Lake Moondarra habitat and thus indirectly on the Egret species. This impact could be in the form of impact to fringing vegetation or impact to fish used as the food source for the species. However these feeding streams are ephemeral and are thus dry for a significant portion of the year. Construction activities will occur during the dry season when no water is present or, if water is present, are experiencing minor flows. If flow is present within streams appropriate sedimentation control practices will be employed to avoid increased sedimentation downstream. As such, it is not expected that pipeline construction activities will have an impact on these species.

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3.1 (f) Commonwealth marine area

(If the action is in the Commonwealth marine area, complete 3.2(c) instead. This section is for actions taken outside the Commonwealth marine area that may have impacts on that area.)

Description

The project area and its surrounds are not located nearby to any Commonwealth marine areas nor do any rivers that intersect the pipeline alignment flow into any marine areas.

Nature and extent of likely impact

Address any impacts on any part of the environment in the Commonwealth marine area.

Consequently, this development will not affect these areas.

3.1 (g) Commonwealth land

(If the action is on Commonwealth land, complete 3.2(d) instead. This section is for actions taken outside Commonwealth land that may have impacts on that land.)

Description

If the action will affect Commonwealth land also describe the more general environment. The Policy Statement titled *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* provides further details on the type of information needed. If applicable, identify any potential impacts from actions taken outside the Australian jurisdiction on the environment in a Commonwealth Heritage Place overseas.

The EPBC protected matters search indicated that there are seven areas of Commonwealth Land within the 50 km buffer of the proposed pipeline alignment. None of these areas is crossed by the proposed pipeline alignment. The areas of commonwealth land are either in Mount Isa or Tennant Creek and are not expected to be impacted by the action.

Nature and extent of likely impact

Address any impacts on any part of the environment in the Commonwealth land. Your assessment of impacts should refer to the *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* and specifically address impacts on:

- ecosystems and their constituent parts, including people and communities;
- natural and physical resources;
- the qualities and characteristics of locations, places and areas;
- the heritage values of places; and
- the social, economic and cultural aspects of the above things.

None

3.1 (h) The Great Barrier Reef Marine Park

Description

This development is well inland from the Great Barrier Reef Marine Park and rivers that intersect the pipeline alignment do not flow into the Pacific Ocean.

Nature and extent of likely impact

Address any impacts on any part of the environment of the Great Barrier Reef Marine Park.

Note: If your action occurs in the Great Barrier Reef Marine Park you may also require permission under the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). If so, section 37AB of the GBRMP Act provides that your referral under the EPBC Act is deemed to be an application under the GBRMP Act and Regulations for necessary permissions and a single integrated process will generally apply. Further information is available at www.gbrmpa.gov.au

This development will not affect the Great Barrier Reef Marine Park.

3.1 (i) A water resource, in relation to coal seam gas development and large coal mining development

Description

If the action is a coal seam gas development or large coal mining development that has, or is likely to have, a significant impact on water resources, the draft *Policy Statement Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources* provides further details on the type of information needed.

Not applicable.

Nature and extent of likely impact

Address any impacts on water resources. Your assessment of impacts should refer to the draft *Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources*.

Not applicable.

3.2 Nuclear actions, actions taken by the Commonwealth (or Commonwealth agency), actions taken in a Commonwealth marine area, actions taken on Commonwealth land, or actions taken in the Great Barrier Reef Marine Park

You must describe the nature and extent of likely impacts (both direct & indirect) on the whole environment if your project:

- is a nuclear action;
- will be taken by the Commonwealth or a Commonwealth agency;
- will be taken in a Commonwealth marine area;
- will be taken on Commonwealth land; or
- will be taken in the Great Barrier Reef marine Park.

Your assessment of impacts should refer to the *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* and specifically address impacts on:

- ecosystems and their constituent parts, including people and communities;
- natural and physical resources;
- the qualities and characteristics of locations, places and areas;
- the heritage values of places; and
- the social, economic and cultural aspects of the above things.

3.2 (a)

Is the proposed action a nuclear action?	X	No
		Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment		

3.2 (b)

Is the proposed action to be taken by the Commonwealth or a Commonwealth agency?	X	No
		Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment		

3.2 (c)	Is the proposed action to be taken in a Commonwealth marine area?	X	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(f))			

3.2 (d)	Is the proposed action to be taken on Commonwealth land?	X	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(g))			

3.2 (e)	Is the proposed action to be taken in the Great Barrier Reef Marine Park?	X	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(h))			

3.3 Other important features of the environment

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed above). If at Section 2.3 you identified any alternative locations, time frames or activities for your proposed action, you must complete each of the details below (where relevant) for each alternative identified.

3.3 (a) Flora and fauna

This region has a warm desert climate receiving approximately 450 mm of rainfall annually, of which most falls in the summer months (December to March) due to monsoon trough influences from the north. Summer maximum temperatures reach the mid 40's and winter minimums drop to around 10 °C.

The proposed pipeline route passes through four bioregions (Figure 8):

- Davenport Murchison Ranges – This bioregion is comprised of low but rugged rocky hills. Vegetation includes hummock grasslands and low open woodland dominated by *Acacia* species. Within this bioregion the pipeline runs through the Ashburton Range and Barkly sub-bioregions.
- Tanami – This bioregion is comprised of sandplains bisected by hills and rocky ranges (Fisher *et al.* 2002). Vegetation includes hummock grasslands and *Acacia* shrublands on the rocky ranges. Within this bioregion the pipeline runs through the Sandover sub-bioregion.
- Mitchell Grass Downs – This bioregion is comprised of grassland plains on cracking clay soils, with some intermittent lakes. Vegetation includes a variety of grasslands dominated by Mitchell Grasses (*Astrebla* spp.). Within this bioregion the pipeline runs through the Barkly Tablelands sub-region.
- Mount Isa Inlier – This bioregion is comprised of rugged hills and ranges bisected by undulating valleys. Vegetation is open woodland with a spinifex hummock grassland understorey

Regional Ecosystem (RE) mapping for the Queensland section of the Planning Corridor provides detail on the vegetation communities near and along the pipeline alignment; of note are RE with a threatened biodiversity status. Within the polygons, five specific Regional Ecosystems with a threatened biodiversity status are crossed by the proposed pipeline alignment; Regional Ecosystems 1.3.4, 1.3.6, 1.5.9 and 4.3.3 are classified as 'Of Concern', and regional ecosystem 1.3.7 is classified as endangered. The potential impact to these RE will be assessed through the Queensland approvals process.

The Planning Corridor includes sections of three Northern Territory Sites of Botanical Significance (SOBS); Wonarah Beds, James River Waterholes, and Georgina River (Figure 9). SOBS are sites which contain special botanical values and are considered in need of protecting but the protection of these sites is not legislated. The

Wonarah Beds SOBS contains the only known population of *Sporobolus latzii*, which is a threatened species (listed as Vulnerable) under the *TPWC Act* (Northern Territory). *S. latzii* is confined to swamp margins and the population will be avoided by the final pipeline alignment. The impact to SOBS, and *S. latzii*, will be assessed through the NT approvals process.

The Davenport and Murchison Ranges Site of Conservation Significance (SOCS) is located adjacent to the southern end of the 50 km buffer (Figure 9). SOCS are sites within the Northern Territory which contain special biodiversity values that are considered in need of protecting but do not have legislated protection. The Davenport and Murchison Ranges SOCS is well outside the Planning Corridor and will not be impacted by the pipeline alignment.

The Rocky Hills habitat at either end of the Planning Corridor has the potential to provide habitat for a number of threatened fauna species. This section of the Planning Corridor is potential habitat for the, Carpentarian Grasswren (*Amytornis dorotheae*) (listed as Near Threatened in Queensland), Purple-necked Rock-wallaby (*Petrogale purpureicollis*) (listed as Vulnerable in Queensland), Northern Leaf-nosed Bat (*Hipposideros stenotis*) (listed as Vulnerable in Queensland) and the Orange Leaf-nosed Bat (*Rhinonictes aurantia*) (listed as Vulnerable in Queensland).

3.3 (b) Hydrology, including water flows

Surface Water

The Planning Corridor is predominately located in two drainage divisions Western Plateau and Lake Eyre. Within these the Planning Corridor is largely within two river basins: Georgina River in the Lake Eyre drainage and Barkly within the Western Plateau Drainage. The western end of the Planning Corridor enters the Wiso Basin within the Western Plateau Drainage. The very eastern end of the Planning Corridor enters the Gulf of Carpentarian Drainage Basin and within that only enters the Leichardt River Basin. Two sections of the Planning Corridor enter this drainage and river basin, the area of which totals 11,320 ha. Of the proposed pipeline alignment approximately 13.5 km lies within the Carpentarian Drainage Basin.

No watercourses within the Planning Corridor are perennial. Due to the long linear nature of the pipeline project the proposed pipeline alignment does cross a number of major watercourses (Table 11). All of these water courses will flow through the wet season and then stop flowing early in the dry season. A map of all water courses intersected by the alignment is shown in Figure 10.

Table 11. Major watercourses intersected by the proposed pipeline alignment

Name	Hierarchy	Hydrology	State
Blue Bush Creek	Major	Non Perennial	NT
Georgina River	Major	Non Perennial	NT
Gosse River	Major	Non Perennial	NT
James River	Major	Non Perennial	NT
Kurundi Creek	Major	Non Perennial	NT
Mingera Creek	Major	Non Perennial	QLD
Polygonum Creek	Major	Non Perennial	QLD
Ranken River	Major	Non Perennial	NT
Redbank Creek	Major	Non Perennial	QLD
Templeton River	Major	Non Perennial	QLD

Name	Hierarchy	Hydrology	State
Tennant Creek	Major	Non Perennial	NT
Whistleduck Creek	Major	Non Perennial	NT
Yaringa Creek	Major	Non Perennial	QLD

Groundwater

Based on Bureau of Meteorology mapping, the Planning Corridor passes over two general ground water areas; the fractured and karstic rocks of the Georgina Basin which contain regional scale aquifers (>50 km), and Palaeozoic and Precambrian fractured rock with low permeability potentially containing local scale aquifers (< 5 km) (Figure 11). The salinity classification within these aquifers ranges from Fresh 2 (500-1500 mg/L) and Saline 1 (3000-300,000 mg/L).

3.3 (c) Soil and Vegetation characteristics

Within the NT part of the corridor the soils mainly consist of Kandosols/calcareous earths (51 %), with Vertosols/cracking clay, Rudosols/loams and Tenosols/Loams (Appendix E). Within the Queensland section of the Planning Corridor the soil types are Vertosols, Kandosols and Rudosols with a small area of Chromosols associated with the rocky hills habitat near Mt Isa.

Based on the CSIRO ASRIS mapping, the majority of the Planning Corridor passes through areas of low to medium erodibility. The section across the black soil plains is an area of high erodibility (Figure 12 for location of black soil plains). Additionally, the vast majority of the Planning Corridor has an extremely low or low probability of acid sulfate soils occurring.

Much of the Planning Corridor passes through homogenous open woodland or grassland habitat. Rocky habitat exists at either end of the Planning Corridor; near Tennant Creek and Mt Isa. The eastern end of the Planning Corridor contains a greater area of Eucalyptus woodland habitat and contains a greater number of water courses and associated riparian vegetation

3.3 (d) Outstanding natural features

The majority of the region of the proposed pipeline is relatively homogenous transitioning across the broad habitat types from rocky ranges at the Tennant Creek end of the pipeline through Mitchell Grass and Acacia shrublands terminating near Mount Isa in rocky ranges.

3.3 (e) Remnant native vegetation

The area within the Planning Corridor is an area of contiguous vegetation. Although it has been used for pastoral purposes it is largely remnant vegetation. The vegetation within the Planning Corridor is described in other sections within this report.

3.3 (f) Gradient (or depth range if action is to be taken in a marine area)

The area is flat or has low relief with the occasional undulating surface. The rocky hills landform at either end of the Planning Corridor has greater gradient (Figure 13). The maximum slope at either end of the Planning Corridor is approximately 5 %. However the proposed pipeline alignment follows a gentler gradient by following gullies through the rocky hills land forms (Figure 14). The proposed pipeline alignment reaches a maximum elevation of 440 masl at the eastern end of the alignment and falls to a low point of 200 masl across the area of black soil plains in the Mitchell Grass Downs Bioregion.

3.3 (g) Current state of the environment

[Include information about the extent of erosion, whether the area is infested with weeds or feral animals and whether the area is covered by native vegetation or crops.](#)

Land uses within the project area are predominately pastoral with other areas of government land. The area is without significant infrastructure development including roads.

Weeds

Of the 32 listed Weeds of National Significance (WoNS), 17 species have been recorded in the four bioregions through which the Planning Corridor passes. A survey of weed species within the Planning Corridor will be conducted prior to the commencement of construction activities.

Table 12. WoNS found within project bioregions

Common name	Scientific name	QLD Class	NT Class
Alligator Weed	<i>Alternanthera philoxeroides</i>	Class 1	Class A
Cabomba	<i>Cabomba caroliniana</i>	Class 2	Class A
Rubber Vine	<i>Cryptostegia grandiflora</i>	Class 2	Class A
Coral cactus	<i>Cylindropuntia fulgida</i> var. <i>mamillata</i>	Class 1/Class 2	
Devil's Rope Cactus	<i>Cylindropuntia imbricata</i>	Class 2	
Hudson Pear	<i>Cylindropuntia rosea</i>	Class 1	
Water Hyacinth	<i>Eichhornia crassipes</i>	Class 2	Class A
Bellyache bush	<i>Jatropha gossypifolia</i>	Class 2	Class A
African Boxthorn	<i>Lycium ferocissimum</i>	Class 2	Class A
Prickly Pear (common)	<i>Opuntia stricta</i>	Class 2	Class B
Velvet tree pear	<i>Opuntia tomentosa</i>	Class 2	Class B
Parkinsonia	<i>Parkinsonia aculeata</i>	Class 2	Class B
Parthenium	<i>Parthenium hysterophorus</i>	Class 2	Class A
Mesquite	<i>Prosopis pallida</i>	Class 2	Class A
Velvet Mesquite	<i>Prosopis velutina</i>	Class 2	Class A
Salvinia	<i>Salvinia molesta</i>	Class 2	Class B
Athel pine	<i>Tamarix aphylla</i>	Class 3	Class B

3.3 (h) Commonwealth Heritage Places or other places recognised as having heritage values

There are no Heritage Places or other place recognised as having heritage values that will be crossed by the pipeline. Table 13 lists the places close to the project area that have heritage value, which are shown in Figure 15.

Table 13. Places with heritage values

Name	State	Distance from alignment	Type
Tennant Creek Telegraph Station Complex	NT	5 km	Historical Reserve
Phillip Creek Settlement	NT	24 km	Historical Reserve
North Star Mine Battery Complex	NT	20 km	Historical Reserve
Attack Creek Historical Reserve	NT	54 km	Historical Reserve
John Flynn Historical Reserve	NT	10 km	Historical Reserve
Casa Grande	QLD	5 km	Indicative Place
Mt Isa Underground hospital	QLD	5 km	Historical Place

3.3 (i) Indigenous heritage values

Cultural heritage values in the Northern Territory and Queensland are protected under the following legislation:

NT	QLD
The Northern Territory Aboriginal Sacred Sites Act 1989 (NT) (ASSA)	Aboriginal Cultural Heritage Act QLD (2003) (ACHA)
The Heritage Act 2011 (NT) (HA)	Queensland Heritage Act 1992 (QHA)

Preliminary searches of the heritage registers in each of the jurisdictions and in relation to the cultural heritage values protected under each of the Acts have been undertaken. These searches have established that while there are some cultural heritage sites within the vicinity of the NEGI alignment, these are expected to be able to be avoided during fine tuning of the pipeline alignment through on-ground cultural heritage surveys during the Planning Phase.

Full cultural heritage surveys for both ethnographic and archaeological sites will be conducted during this phase and Jemena has commenced discussions regarding the arrangements for these with the Aboriginal organisations aforementioned. For example, the CLC has commenced consultations with traditional Aboriginal owners and site custodians for the areas of the NEGI alignment within their jurisdiction and discussions with the NLC, the Arruwarra, Indjalandji-Dhidhanu and Kalkadoon are in progress.

Jemena adopts an avoidance principle in relation to cultural heritage values and will work closely with the relevant organisations and Government agencies in relation to determining a final pipeline corridor and project footprint that avoids completely or minimises any impacts to cultural heritage values.

3.3 (j) Other important or unique values of the environment

Describe any other key features of the environment affected by, or in proximity to the proposed action (for example, any national parks, conservation reserves, wetlands of national significance etc).

N/A

3.3 (k) Tenure of the action area (eg freehold, leasehold)

Table 3 and Table 4 present the tenure for land crossed by the proposed alignment in the Northern Territory and Queensland respectively. As seen from these tables most of the land is pastoral lease.

3.3 (l) Existing land/marine uses of area

N/A

3.3 (m) Any proposed land/marine uses of area

None Known

4 Measures to avoid or reduce impacts

Note: If you have identified alternatives in relation to location, time frames or activities for the proposed action at Section 2.3 you will need to complete this section in relation to each of the alternatives identified.

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

For any measures intended to avoid or mitigate significant impacts on matters protected under the EPBC Act, specify:

- what the measure is,
- how the measure is expected to be effective, and
- the time frame or workplan for the measure.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

Provide information about the level of commitment by the person proposing to take the action to implement the proposed mitigation measures. For example, if the measures are preliminary suggestions only that have not been fully researched, or are dependent on a third party's agreement (e.g. council or landowner), you should state that, that is the case.

Note, the Australian Government Environment Minister may decide that a proposed action is not likely to have significant impacts on a protected matter, as long as the action is taken in a particular manner (section 77A of the EPBC Act). The particular manner of taking the action may avoid or reduce certain impacts, in such a way that those impacts will not be 'significant'. More detail is provided on the Department's web site.

For the Minister to make such a decision (under section 77A), the proposed measures to avoid or reduce impacts must:

- clearly form part of the referred action (eg be identified in the referral and fall within the responsibility of the person proposing to take the action),
- be must be clear, unambiguous, and provide certainty in relation to reducing or avoiding impacts on the matters protected, and
- must be realistic and practical in terms of reporting, auditing and enforcement.

More general commitments (eg preparation of management plans or monitoring) and measures aimed at providing environmental offsets, compensation or off-site benefits CANNOT be taken into account in making the initial decision about whether the proposal is likely to have a significant impact on a matter protected under the EPBC Act. (But those commitments may be relevant at the later assessment and approval stages, including the appropriate level of assessment, if your proposal proceeds to these stages).

4.1 Threatened species

Table 14. Potentially impacted species

Species	Potential Impact
Gouldian Finch (<i>Erythrura gouldiae</i>)	Clearing of suitable Eucalyptus habitat
Masked Owl (Northern) (<i>Tyto novaehollandiae kimberli</i>)	Disturbance of vegetation
Carpentarian Antechinus (<i>Pseudantechinus mimulus</i>)	Direct disturbance of rocky habitat Introduction of spread of Buffel Grass.

Gouldian Finch (*Erythrura gouldiae*)

Given the reliance of the species on specific Eucalyptus habitat and requirement for feeding grasses these vegetation communities are the focus of impact mitigation.

The proposed pipeline alignment does pass through habitat that is potentially breeding and/or feeding habitat for the species. However, the development is linear and will only disturb small areas of Eucalyptus habitat. This small area of disturbance is unlikely to have an impact on the species. In order to minimize impacts to Gouldian Finch the species specific mitigation measures (along with general mitigation measures) will be employed to avoid and minimise any impact to the species.

- Pre-construction surveys will be conducted within areas of potential Gouldian Finch habitat to determine if the species is present. Surveys will follow EPBC Survey Guidelines for Australia's Threatened Birds (Commonwealth of Australia, 2010).
- Construction activities will be conducted during the dry season to avoid breeding season of the Gouldian Finch.
- Protocols outlined in the weed management plan (to be developed) shall be followed by all personnel within the Planning Corridor to avoid introduction of weed species and thus potentially modify fire regimes.

Masked Owl (*Tyto novaehollandiae kimberli*)

Given the large home ranges, the linear nature of disturbance and low numbers of large hollow bearing trees it is unlikely that the species will be impacted. However, in order to minimize impacts to the Masked Owl the species specific mitigation measures (along with general mitigation measures) will be employed to avoid and minimise any impact to the species.

- Pre-construction call play back surveys will be conducted in areas of potential Masked Owl habitat to determine the presence of Masked Owls. Surveys will follow EPBC Survey Guidelines for Australia's Threatened Birds (Commonwealth of Australia, 2010).
- If species are detected within construction areas, a species specific management plan will be developed for the species.
- Protocols outlined in the weed management plan (to be developed) shall be followed by all personnel within the Planning Corridor to avoid introduction of weed species which can impact the food source of the Masked Owl. The weed management plan will be developed in accordance with the standards specified in the APIA Code of Environmental Practice-Onshore Pipelines.

Carpentarian Antechinus (*Pseudantechinus mimulus*)

It is unlikely that the Carpentarian Antechinus will be impacted by the project. The potential impacts to the species are disturbance through noise and vibrations of construction activities and the spread/introduction of Buffel Grass. As discussed in (Section 3) it is unlikely the project will impact the species through these potentially threatening processes, however, the following impact mitigation measures (in addition to general measures outlined below) will be applied to avoid and reduce impacts to the species.

- Pre-construction surveys will be conducted in rocky hills habitat areas near Mount Isa to locate populations of Carpentarian Antechinus. Surveys will follow EPBC Survey Guidelines for Australia's Threatened Mammals (Commonwealth of Australia, 2011).
- If individuals are detected along the proposed pipeline alignment, a species specific management plan will be developed to manage any impacts.
- Blasting will be kept to the minimum area required to minimise potential noise and vibration impacts to the species.
- Protocols outlined in the weed management plan (to be developed) shall be followed by all personnel within the Planning Corridor to avoid introduction of weed species which can impact the food source of the Carpentarian Antechinus. The weed management plan will be developed in accordance with the standards specified in the APIA Code of Environmental Practice-Onshore Pipelines.
- Any new infestations of Buffel Grass will be eradicated by appropriately qualified personnel.
- Construction will be timed to begin at the Mount Isa end of the pipeline at the beginning of the dry season and progress west. As such there will not be any construction activities occurring within potential breeding habitat at the onset of the breeding season.

4.2 General measures

Flora and Fauna

Management of impacts to flora and fauna will be through the following:

- Where practicable, the pipeline route has been chosen using the principles of avoiding and minimising impacts to fauna habitats;
- Where possible access tracks will use existing tracks;
- Vegetation clearing will only include a width of 30 m along the pipeline corridor and in the areas for accommodation camps if they can't be situated in clear areas;
- The pipeline corridor will be rehabilitated progressively during the construction phase;
- While open trenches will be checked every morning by fauna spotters, and any fauna in the trench will be caught, checked and released in appropriate habitat nearby;
- Native fauna will not be captured, taken or fed without the appropriate permits;
- Vehicle speed limits on site will be set and enforced;
- Any injuries or fatalities to fauna will be reported to the Site Environmental Manager and recorded;
- Fires will not be permitted on site without appropriate approvals and safety precautions;
- Vehicle inspections will be carried out particularly when leaving areas with a high occurrence of weed species and into areas with low weed numbers or significant species/habitat; and
- Site personnel will be provided with training to raise awareness, particularly with regard to identification of Weeds of National Significance.
- Disturbed areas will be progressively rehabilitated with local species that provide suitable habitat for native fauna;
- A Weed Management Plan will be developed. This plan will be informed by the weed survey occurring in early 2016. Broadly, the plan will ensure that no new weeds are introduced and current weeds will not be dispersed.

Surface water

Surface water impacts will be managed through the following:

- Pre-existing access tracks will be used where possible to minimise interference to natural drainage;
- Any new disturbance areas will be located to avoid drainage lines and designed for minimal impact on surface drainage as far as practicable;
- Surface water diversion structures that enable non-contaminated water to be directed around disturbance areas will be designed, installed and managed;
- Erosion and sediment control structures will be installed downstream of disturbance areas;
- Where surface water is present, vegetation removal on adjacent areas of relief will be delayed as long as possible to avoid erosion and sedimentation;
- Cleared vegetation and topsoil will be stockpiled away from watercourses and in discrete stockpiles to avoid any interference to surface flows; and
- Chemicals and hydrocarbons will be stored in accordance with relevant legislation and standards.

Air and noise

Air quality issues will be managed through comprehensive community and stakeholder engagement. A Consultation Plan will facilitate opportunities for residents to have any issues heard and dealt with in relation to any potential impacts from mining operations including dust and noise.

Management will be continuously refined and strengthened in response to any community or other stakeholder concerns. To mitigate impacts from dust:

- All vehicles will be required to stay on defined tracks and roads unless otherwise authorised;
- Dust suppression measures will be used such as water trucks;
- Speed limits will be set and enforced;
- The extent of exposed areas susceptible to wind erosion will be minimised;
- Rehabilitation will be undertaken progressively to minimise exposed soil;
- High dust-generating activities will be limited during adverse weather conditions;
- Design of construction and operations to incorporate methods to minimise vehicle movements and duplication of activities to reduce cost, greenhouse gas emissions and increase efficiency;
- Vegetation clearing will be minimised where practicable;
- Blasting and rock hammering will be minimised where practicable and only during daylight hours and low wind conditions;
- Progressive rehabilitation of open areas will result in partial offsets of emissions over the life of the Project; and
- All vehicles and plant will be maintained in accordance with manufacturer's instructions and the site maintenance schedule.

5 Conclusion on the likelihood of significant impacts

Identify whether or not you believe the action is a controlled action (ie. whether you think that significant impacts on the matters protected under Part 3 of the EPBC Act are likely) and the reasons why.

5.1 Do you THINK your proposed action is a controlled action?

☒	No, complete section 5.2
☐	Yes, complete section 5.3

5.2 Proposed action IS NOT a controlled action.

Specify the key reasons why you think the proposed action is NOT LIKELY to have significant impacts on a matter protected under the EPBC Act.

From the likelihood of occurrence analysis and potential impact assessment three species were determined to be potentially impacted by the project (Table 14). The potential impact to threatened species is expected to be minor, however mitigation and management measures detailed in Section 4 outline how any potential impact will be further avoided and minimized. Following the application of the mitigation and management measures, the potential for significant impact was assessed for each species (below). It is not anticipated that the project will have a significant impact on any threatened species. The bases for this conclusion are addressed species-by-species below.

Endangered species

Gouldian Finch (*Erythrura gouldiae*)

The Gouldian Finch could potentially occur in *Eucalyptus* vegetation communities towards the Mt. Isa end of the Planning Corridor. The linear nature and the small footprint of the pipeline project means that a small area of habitat will be disturbed. The small area that will be disturbed is not core habitat for the species. The mitigation and management measures further reduce the potential impact to the species; as such the project is unlikely to have a significant impact on the species.

Table 15. Gouldian Finch Impact Analysis

Gouldian Finch Significant Impact Analysis	
Impact criteria	Impact determination
Lead to a long-term decrease in the size of a population	UNLIKELY. The small linear area of disturbance will only affect a small area of potential habitat (for a short period of time) which will be rehabilitated following construction. The small affected area is unlikely to have a long-term impact on the species.
Reduce the area of occupancy of the species	UNLIKELY. The small linear area of disturbance will only affect a small area of potential habitat which will be rehabilitated following construction. The small affected area is unlikely to reduce the area of occupancy of the species.
Fragment an existing population into two or more populations	UNLIKELY. The proposed pipeline alignment does not traverse any known populations of the species. The temporary nature of the disturbance is unlikely to fragment a population if the species is detected in surveys.
Adversely affect habitat critical to the survival of a species	UNLIKELY. The small area of habitat affected is well away from major populations and is a small percentage of similar vegetation within the immediate vicinity.
Disrupt the breeding cycle of a population	UNLIKELY. Breeding of the Gouldian Finch occurs in the wet season which is outside of construction period. The small area of vegetation removed will not impact the available breeding sites of the species.

Gouldian Finch Significant Impact Analysis	
Impact criteria	Impact determination
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	UNLIKELY. The small area of habitat affected is well away from major populations and is a small percentage of similar vegetation within the immediate vicinity. The affected area is unlikely to cause the species to decline.
Result in invasive species that are harmful to an endangered species becoming established in the endangered or species habitat	UNLIKELY. Progressive rehabilitation of the site and the weed management plan will minimise the spread of weeds.
Introduce disease that may cause the species to decline	UNLIKELY. The project is unlikely to increase the infection of <i>Sternostoma tracheacolum</i> and thus unlikely to have an impact on the species.
Interfere with the recovery of the species	UNLIKELY. The disturbance of the small area of habitat is unlikely to interfere with the recovery of the species.

Vulnerable species

Carpentarian Antechinus (*Pseudantechinus mimulus*)

The Carpentarian Antechinus was determined to be likely to occur at locations in the rocky hills habitat at the eastern end of the Planning Corridor. However the potential impact to the species from noise and vibrations and the introduction of weed species is low. In addition, by following the mitigation measures described in Section 4 the project is unlikely to have a significant impact on the Carpentarian Antechinus.

Table 16. Carpentarian Antechinus Impact Analysis

Carpentarian Antechinus Significant Impact Analysis	
Impact criteria	Impact determination
Lead to a long-term decrease in the size of an important population of a species	UNLIKELY. The pipeline alignment will disturb a small portion of the species mapped potential habitat. If species are found in pre-construction surveys it is unlikely that they will be impacted by the project.
Reduce the area of occupancy of an important population	UNLIKELY. Construction activities will disturb a small area of potential habitat and be progressively rehabilitated.
Fragment an existing important population into two or more populations	UNLIKELY. Construction activities will disturb a small area of potential habitat and be progressively rehabilitated.
Disrupt the breeding cycle of an important population	UNLIKELY. Construction activities will begin in April at the eastern end of the pipeline and work west. Construction activities will be completed within any potential breeding habitat before the onset of the breeding season.
Adversely affect habitat critical to the survival of a species	UNLIKELY. The pipeline alignment will disturb a small portion of the mapped potential habitat for the Carpentarian Antechinus. The area will be progressively rehabilitated.
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	UNLIKELY. The pipeline alignment will disturb a small portion of potential habitat for the Carpentarian Antechinus and it is unlikely that this will cause the species to decline. All disturbed areas will be rehabilitated following construction activities.
Result in invasive species that are harmful to the species becoming established in the species' habitat	UNLIKELY. Buffel Grass is currently present in the potential habitat area of the Carpentarian Antechinus near Mt Isa. Development and implementation of the weed management plan will minimise the spread of Buffel Grass. New infestations of Buffel Grass will be eradicated. The area will be progressively rehabilitated following construction activities to help avoid weed infestation.
Introduce disease that may cause the species to decline	UNLIKELY. There is no known correlation between a development such as this and a disease that affects this species.

Carpentarian Antechinus Significant Impact Analysis	
Impact criteria	Impact determination
Interfere substantially with the recovery of the species.	UNLIKELY. The disturbed area will be a small portion of potential habitat and will not interfere with the recovery of the species.

Masked Owl (Northern) (*Tyto novaehollandiae kimberli*)

Occurrence of the Masked Owl (Northern) is sparse and the species is broad ranging with large home ranges making significant impact from linear project unlikely. The measures to avoid impact to the species as described in Section 4 further reduce the potential impact to the species; as such the project is unlikely to have a significant impact on the Masked Owl (Northern).

Table 17. Masked Owl (Northern) Impact Analysis

Masked Owl (Northern) Significant Impact Analysis	
Impact criteria	Impact determination
Lead to a long-term decrease in the size of an important population of a species	UNLIKELY. Any disturbance to vegetation will constitute a small portion of any pairs' home range and is unlikely to have an impact on the species.
Reduce the area of occupancy of an important population	UNLIKELY. Any disturbance to vegetation will constitute a small portion of any pairs' home range and is unlikely to have an impact on the species.
Fragment an existing important population into two or more populations	UNLIKELY. There are no known populations of the species that will be intersected by the proposed pipeline alignment.
Disrupt the breeding cycle of an important population	UNLIKELY. Construction activities will begin in April at the eastern end of the pipeline and work west. Construction activities will be completed within any potential breeding habitat before the onset of the breeding season.
Adversely affect habitat critical to the survival of a species	UNLIKELY. The small area of disturbed vegetation within each potential home range is unlikely to affect the survival of the species.
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	UNLIKELY. The small areas of vegetation disturbed within each home range are unlikely to lead to a decline in species number.
Result in invasive species that are harmful to the species becoming established in the species' habitat	UNLIKELY. Progressive rehabilitation of the site and the weed management plan will minimise the spread of weeds.
Introduce disease that may cause the species to decline	UNLIKELY. There is no known correlation between a development such as this and a disease that affects this species.
Interfere substantially with the recovery of the species.	UNLIKELY. The disturbed area will be a small portion of any home range and will not affect the persistence of breeding pairs or the establishment of new home ranges.

5.3 Proposed action IS a controlled action

Type 'x' in the box for the matter(s) protected under the EPBC Act that you think are likely to be significantly impacted. (The 'sections' identified below are the relevant sections of the EPBC Act.)

Matters likely to be impacted

☐	World Heritage values (sections 12 and 15A)
☐	National Heritage places (sections 15B and 15C)
☐	Wetlands of international importance (sections 16 and 17B)
☐	Listed threatened species and communities (sections 18 and 18A)

☐	Listed migratory species (sections 20 and 20A)
☐	Protection of the environment from nuclear actions (sections 21 and 22A)
☐	Commonwealth marine environment (sections 23 and 24A)
☐	Great Barrier Reef Marine Park (sections 24B and 24C)
☐	A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
☐	Protection of the environment from actions involving Commonwealth land (sections 26 and 27A)
☐	Protection of the environment from Commonwealth actions (section 28)
☐	Commonwealth Heritage places overseas (sections 27B and 27C)

Specify the key reasons why you think the proposed action is likely to have a significant adverse impact on the matters identified above.

EHP RTI DL Release

6 Environmental record of the responsible party

NOTE: If a decision is made that a proposal needs approval under the EPBC Act, the Environment Minister will also decide the assessment approach. The EPBC Regulations provide for the environmental history of the party proposing to take the action to be taken into account when deciding the assessment approach.

	Yes	No
<p>6.1 Does the party taking the action have a satisfactory record of responsible environmental management?</p> <p>Provide details</p> <p>Jemena operates in a manner that protects the health of the environment. The company abides by best practice environmental management and processes.</p> <p>Jemena has a clean environmental record.</p>	X	
<p>6.2 Has either (a) the party proposing to take the action, or (b) if a permit has been applied for in relation to the action, the person making the application - ever been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources?</p> <p>If yes, provide details</p>		X
<p>6.3 If the party taking the action is a corporation, will the action be taken in accordance with the corporation's environmental policy and planning framework?</p> <p>If yes, provide details of environmental policy and planning framework</p> <p>Jemena has an Environmental Management System which promotes the protection of the environment and use of best practice environmental management.</p> <p>The Environmental Management System is regularly evaluated the reporting of which is used to improve the system.</p>	X	
<p>6.4 Has the party taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?</p> <p>Provide name of proposal and EPBC reference number (if known)</p>		

7 Information sources and attachments

(For the information provided above)

7.1 References

- List the references used in preparing the referral.
- Highlight documents that are available to the public, including web references if relevant.

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7.2 Reliability and date of information

For information in section 3 specify:

- source of the information;
- how recent the information is;
- how the reliability of the information was tested; and
- any uncertainties in the information.

The information provided within this referral document has been prepared by environmental scientists from EcOz Environmental Consultants. The findings are the result of desk assessment using the latest available information and data sources. All data sources were checked at the time of preparation of this referral and are thus considered to be reliable and recent for use in this referral.

7.3 Attachments

Indicate the documents you have attached. All attachments must be less than three megabytes (3mb) so they can be published on the Department's website. Attachments larger than three megabytes (3mb) may delay the processing of your referral.

		✓ attached	Title of attachment(s)
You must attach	figures, maps or aerial photographs showing the project locality (section 1)		
	GIS file delineating the boundary of the referral area (section 1)		
	figures, maps or aerial photographs showing the location of the project in respect to any matters of national environmental significance or important features of the environments (section 3)		
If relevant, attach	copies of any state or local government approvals and consent conditions (section 2.5)		
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)		
	copies of any flora and fauna investigations and surveys (section 3)		
	technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3 and 4)		
	report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)		

8 Contacts, signatures and declarations

NOTE: Providing false or misleading information is an offence punishable on conviction by imprisonment and fine (s 489, EPBC Act).

Under the EPBC Act a referral can only be made by:

- the person proposing to take the action (which can include a person acting on their behalf); or
- a Commonwealth, state or territory government, or agency that is aware of a proposal by a person to take an action, and that has administrative responsibilities relating to the action¹.

Project title: Jemena NEGI pipeline

8.1 Person proposing to take action

This is the individual, government agency or company that will be principally responsible for, or who will carry out, the proposed action.

If the proposed action will be taken under a contract or other arrangement, this is:

- the person for whose benefit the action will be taken; or
- the person who procured the contract or other arrangement and who will have principal control and responsibility for the taking of the proposed action.

If the proposed action requires a permit under the Great Barrier Reef Marine Park Act², this is the person requiring the grant of a GBRMP permission.

The Minister may also request relevant additional information from this person.

If further assessment and approval for the action is required, any approval which may be granted will be issued to the person proposing to take the action. This person will be responsible for complying with any conditions attached to the approval.

If the Minister decides that further assessment and approval is required, the Minister must designate a person as a proponent of the action. The proponent is responsible for meeting the requirements of the EPBC Act during the assessment process. The proponent will generally be the person proposing to take the action³.

1. Name and Title: 73(2)

2. Organisation: Jemena Queensland Gas Pipeline (1) Pty Ltd

3. EPBC Referral
Number (if known):

4: ACN / ABN: 083 050 284

5. Postal address

6. Telephone: 73(2)

7. Email:

8. Name of designated
proponent (if not the
same person at item 1
above and if
applicable):

¹ If the proposed action is to be taken by a Commonwealth, state or territory government or agency, section 8.1 of this form should be completed. However, if the government or agency is aware of, and has administrative responsibilities relating to, a proposed action that is to be taken by another person which has not otherwise been referred, please contact the Referrals Gateway (1800 803 772) to obtain an alternative contacts, signatures and declarations page.

² If your referred action, or a component of it, is to be taken in the Great Barrier Reef Marine Park the Minister is required to provide a copy of your referral to the Great Barrier Reef Marine Park Authority (GBRMPA) (see section 73A, EPBC Act). For information about how the GBRMPA may use your information, see http://www.gbrmpa.gov.au/privacy/privacy_notice_for_permits.

³ If a person other than the person proposing to take action is to be nominated as the proponent, please contact the Referrals Gateway (1800 803 772) to obtain an alternative contacts, signatures and declarations page.

9. ACN/ABN of designated proponent (if not the same person named at item 1 above):

COMPLETE THIS SECTION ONLY IF YOU QUALIFY FOR EXEMPTION FROM THE FEE(S) THAT WOULD OTHERWISE BE PAYABLE

- I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:
- ☐ an individual; OR
 - ☐ a small business entity (within the meaning given by section 328-110 (other than subsection 328-119(4)) of the *Income Tax Assessment Act 1997*); OR
 - ☐ not applicable.

If you are small business entity you must provide the Date/Income Year that you became a small business entity:

Note: You must advise the Department within 10 business days if you cease to be a small business entity. Failure to notify the Secretary of this is an offence punishable on conviction by a fine (regulation 5.23B(3) *Environment Protection and Biodiversity Conservation Regulations 2000 (Cth)*).

COMPLETE THIS SECTION ONLY IF YOU WOULD LIKE TO APPLY FOR A WAIVER

- I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the [EPBC Regulations](#). Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made:
- ☐ not applicable.
- Declaration

I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.
I understand that giving false or misleading information is a serious offence.
I agree to be the proponent for this action.
I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature

Date

8.2

Person preparing the referral information (if different from 8.1)

Individual or organisation who has prepared the information contained in this referral form.

Name	73(2)		
Title			
Organisation	EcOz Pty Ltd		
ACN / ABN (if applicable)	81 143 989 039		
Postal address	GPO Box 381		
Telephone			
Email	ecoz@ecoz.com.au		
Declaration	I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct. I understand that giving false or misleading information is a serious offence.		
Signature		Date	

EHP RTI DL Release

REFERRAL CHECKLIST

NOTE: This checklist is to help ensure that all the relevant referral information has been provided. It is not a part of the referral form and does not need to be sent to the Department.

HAVE YOU:

- ☐ Completed all required sections of the referral form?
- ☐ Included accurate coordinates (to allow the location of the proposed action to be mapped)?
- ☐ Provided a map showing the location and approximate boundaries of the project area?
- ☐ Provided a map/plan showing the location of the action in relation to any matters of NES?
- ☐ Provided a digital file (preferably ArcGIS shapefile, refer to guidelines at Attachment A) delineating the boundaries of the referral area?
- ☐ Provided complete contact details and signed the form?
- ☐ Provided copies of any documents referenced in the referral form?
- ☐ Ensured that all attachments are less than three megabytes (3mb)?
- ☐ Sent the referral to the Department (electronic and hard copy preferred)?

EHP RTI DL Release

Geographic Information System (GIS) data supply guidelines

If the area is less than 5 hectares, provide the location as a point layer. If the area greater than 5 hectares, please provide as a polygon layer. If the proposed action is linear (eg. a road or pipeline) please provide a polyline layer.

GIS data needs to be provided to the Department in the following manner:

- Point, Line or Polygon data types: ESRI file geodatabase feature class (preferred) or as an ESRI shapefile (.shp) zipped and attached with appropriate title
- Raster data types: Raw satellite imagery should be supplied in the vendor specific format.
- Projection as GDA94 coordinate system.

Processed products should be provided as follows:

- For data, uncompressed or lossless compressed formats is required - GeoTIFF or Imagine IMG is the first preference, then JPEG2000 lossless and other simple binary+header formats (ERS, ENVI or BIL).
- For natural/false/pseudo colour RGB imagery:
 - If the imagery is already mosaiced and is ready for display then lossy compression is suitable (JPEG2000 lossy/ECW/MrSID). Prefer 10% compression, up to 20% is acceptable.
 - If the imagery requires any sort of processing prior to display (i.e. mosaicing/colour balancing/etc) then an uncompressed or lossless compressed format is required.

Metadata or 'information about data' will be produced for all spatial data and will be compliant with ANZLIC Metadata Profile. (http://www.anzlic.org.au/policies_guidelines#guidelines).

The Department's preferred method is using ANZMet Lite, however the Department's Service Provider may use any compliant system to generate metadata.

All data will be provide under a Creative Commons license (<http://creativecommons.org/licenses/by/3.0/au/>)

PPL2015 – Jemena North East Gas Interconnector (NEGI) Pipeline

Meeting agenda to discuss whether application is a properly made application.

1. Eligibility Criteria - does not meet eligibility criteria

- 165km pipeline
- ERA 63 - Sewage treatment – no information is provided on this or ERAs below
 - o ERA14 – electricity generation (gas)
 - o ERA15 – Fuel Burning

2. Standard Conditions – does not meet standard conditions

- PPL2015 will need activities other than low impact activities in Cat B and Cat C ESAs
 - o Offsets may be required

3. Offsets

The application states that “where required, significant impact to vegetation will be offset in accordance with the *Queensland Environmental Offsets Policy (Version 1.1)*” No other information has been provided by the proponent in relation to Offsets.

4. EIS – Not applicable

As per "Guideline: Triggers for environmental impact statements (EIS) under the Environmental Protection Act 1994 for mining and petroleum activities" EIS triggered when:	PPL2015 - NEGI pipeline
• total disturbance area greater than 2000 hectares at any one time during the life of the proposed activity	The total area of disturbance due to the NEGI pipeline will be 540.1ha.
• involve the construction of a high pressure pipeline over a distance of 300 kilometres or greater	Total length of the NEGI pipeline will be 165km.
• involve the construction of a liquefied natural gas plant	NEGI pipeline does not involve the construction of an LNG plant.

5. Referral of Proposed Action under EPBC Act 1999

- Purpose of referral is to determine whether the proposed action will need formal assessment and approval under the EPBC Act.
- There are 2 MNES within the Planning Corridor – threatened species and migratory species.
- Jemena concludes that neither will be significantly impacted by the development as the construction is over a short period, the area will be rehabilitated following construction and linear nature of project affects small area of habit on the landscape scale.

6. Timeframes

- Decision on properly made application (10BD) – **due 12-Oct**
- Issue information request (20BD) – **due 9-Nov**

- Receive response to information request – up to 6 months' time can be allowed to proponent. EHP can extend information request period only once but proponent can ask for extension anytime in writing
- Public notification – 10 BD after receiving response to information request
- Decision stage – beings when all above stages have ended and 20BD permitted
- Issue EA – 5BD after decision made

7. Fees Issue

- Proponent provided a purchase order with the application for the correct fee amount of \$24,818.25 & requested EHP to provide a reference number which would enable them to pay the fee via Electronic Fund Transfer (eDocs no.4193345).
- PALM received the application on 25 September 2015 and forwarded the application package to Petroleum and Gas (P&G) on 1 October 2015. However, PALM did not provide the proponent with this requested information.
- On 6 October 2015, P&G sent an email to PALM requesting them to follow up on the fees and provide receipt to P&G when the correct fee was paid (eDocs no.4193280).
- Therefore, EHP had the means to receive the fees and the delay in receiving the fee is the responsibility of EHP and hence, recommendation is that the application will be viewed to be Properly Made (in respect to fees paid) in line with the administrative decision making training received.

Checklist

Environmental Protection Act 1994

Assessment of properly made application for an environmental authority

This checklist is to be used to assess whether an application for an environmental authority contains the information required under section 125 of the Environmental Protection Act 1994 and the additional information required for a site-specific application for a CSG activity under section 126.

Part A – Lodgement details

EA NO:	EPPG03497815	PROJECT NO:	433413
APPLICANT:	Jemena Queensland Gas Pipeline (1) Pty Ltd	FILE NO:	101/0016335-001(E)-150925 - New EA Application
TENURE:	PPL2015	RECEIVED DATE:	25 September 2015
PROJECT NAME:	North East Gas Interconnector (NEGI)	CHECKLIST DUE:	12 October 2015
APPLICATION DESCRIPTION:	<p>In 2014, the Northern Territory Government sought proposals for the development of a gas pipeline connecting the Northern and Eastern Gas Markets to be known as the North East Gas Interconnector (NEGI). The NEGI will connect gas fields in Northern Australia with customers in the Eastern Gas Market through the building of a 622 km gas pipeline (and associated infrastructure) from near Tennant Creek to Mount Isa which would connect the Amadeus and Carpentarian gas pipeline. Of the total length, 165 km is within Queensland.</p> <p>Jemena Queensland Gas Pipeline (1) Pty Ltd (Jemena) has been shortlisted by the Northern Territory Government as one of the companies to build, own and operate the proposed gas pipeline and is currently going through a competitive process with three other companies. By the end of September 2015, all four companies are required to submit their Final Proposals to the Territory's Request for Final Proposal (RFFP), with one company eventually being selected as preferred proponent by the Territory.</p> <p>Jemena have therefore applied for a site-specific environmental authority (EA) for the construction and operation of the 165km of high pressure gas pipeline. A site specific EA was required as the project cannot meet the eligibility criteria for a standard assessment since the pipeline is greater than 150 km in length. This is the only eligibility criteria not met by the project. Additionally, the project cannot comply with a single standard condition, namely the project requires undertaking activities other than low impact activities in category B and category C Environmentally Sensitive Areas (ESAs). No impacts are proposed to category A ESAs.</p> <p>The application is for the following environmentally relevant activity (ERA) as per Schedule 2 of the Environmental Protection Regulation 2008:</p> <ul style="list-style-type: none"> • ERA 63: operating sewage treatment works, other than no-release works, with a total daily peak design capacity of more than 100 but not more than 1500EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme. <p>The application is also for the following ERAs as per Schedule 2A of the Environmental</p>		

Assessment checklist for an application for an environmental authority

	Protection Regulation 2008: <ul style="list-style-type: none"> • A petroleum activity that is likely to have a significant impact on a category A or B ESA; and • Constructing a pipeline of more than 150km under a petroleum authority.
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Part B – Assessment

For an application for an environmental authority (EA) to be a properly made application it must include all of the information required under section 125 of the *Environmental Protection Act 1994* (EP Act). For a site-specific application for a CSG activity, the additional information requirements of section 126 must also be satisfied (Part C). The checklist will not be required for a standard application.

Indicate whether the following requirements have been met by selecting the appropriate option. Where “No” or “N/A” is selected, insert a justification. For a “No” response, further discussion in the recommendation section is also required.

Requirements for Applications Generally (Section 125(1)(a) - (k), (n))	Yes/ No N/A	Justification (if required)
Has the application been made to the administering authority?	Yes	The application was submitted electronically to PALM on 25 September 2015 and a hard-copy of the application was received by PALM on 28 September 2015.
Has the application been made in the approved form?	Yes	The correct application form has been used: <i>site-specific application for a new environmental authority for a resource activity</i> . Form EM1282-150327

Assessment checklist for an application for an environmental authority

Requirements for Applications Generally (Section 125(1)(a) - (k), (n))	Yes/ No N/A	Justification (if required)
Does the application describe all environmentally relevant activities for the application?	Yes	<p>The application requests one ERA:</p> <ul style="list-style-type: none"> ERA 63: operating sewage treatment works, other than no-release works, with a total daily peak design capacity of—more than 100 but not more than 1500EP—if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme. <p>The original application package, submitted on 25 September 2015, requested two additional ERAs (ERA 14 - electricity generation and ERA - 15 fuel burning), however, no further description of these ERAs was provided as required by s125 of the EP Act. Clarification was sought from the applicant via phone-call and email (eDocs no. 4196553) on 8 October 2015. The applicant provided a response on 12 October 2015 and clarified that ERAs 14 and 15 were not being sought and only ERA 63 (sewage treatment) was required.</p>
Does the application describe the land on which each activity will be carried out?	Yes	<p>GPS coordinates have been provided for the pipeline (section 1.2.1 of the Supporting Information) and lot descriptions have been provided for land affected by the construction and operation of PPL2015 (section 1.4 of the Supporting Information).</p> <p>Descriptions of the landform (including terrain, land zone, soil and acid sulphate soils) have been provided in Section 5.6 of the Supporting Information.</p>
Is the application accompanied by the fee prescribed under a regulation?	Yes	<p>The application fee of \$24,819.25 (\$589.00 application fee + 30% of annual fee which is currently \$80,767.50) was paid on 12 October 2015. See Part D below for detailed information on fees.</p>
Does the application nominate a principal applicant where two or more entities jointly make the application?	No	<p>There is only one applicant - Jemena Queensland Gas Pipeline (1) Pty Ltd.</p>

Assessment checklist for an application for an environmental authority

Requirements for Applications Generally (Section 125(1)(a) - (k), (n))	Yes/ No N/A	Justification (if required)
Does the application state whether the application is a standard application, a variation application or a site-specific application?	Yes	Section 1 of the Supporting Information states that it is a site-specific application due to the length of the pipeline (165km) and due to the need to carry out construction activities in category B and category C environmentally sensitive area (ESAs).
Does the application state whether the applicant is a registered suitable operator?	Yes	The applicant states that it is a suitable operator and provided their registered suitable operator number as 628733. This was confirmed on the EHP suitable operator register.
If a development permit under the Planning Act, or an SDA approval under the State Development Act, is required under either of those Acts for carrying out the environmentally relevant activities for the application—describe the permit or approval.	Yes	<p>Section 8 of the Supporting Information provides a list of approvals that may be applied for during the project under different legislations.</p> <p>Approvals under the Sustainable Planning Act 2009 may include:</p> <ul style="list-style-type: none"> • Development Approval under the relevant Local Government Planning Scheme; • Evidence of Landholder Consent; • Development Approval for Building Work; • Development Approval for Operational Works; • Development Approval (Development on a local heritage place); • Development Approval (Development on a Queensland heritage place); and • Development Approval for Operational Works (Waterway barriers).

Assessment checklist for an application for an environmental authority

Requirements for Applications Generally (Section 125(1)(a) - (k), (n))	Yes/ No N/A	Justification (if required)
If the application is a standard or variation application— does the application include a declaration that each relevant activity complies with the eligibility criteria?	NA	<p>The application is for a site specific EA as the project cannot meet the eligibility criteria for a standard assessment as it is greater than 150 km in length. This is the only eligibility criteria not met by the project.</p> <p>Additionally, the project cannot comply with a single standard condition, namely the project requires undertaking activities other than low impact activities in category B and category C ESAs. There will be no impacts to category A ESAs.</p> <p>The application document has been prepared in reference to the Eligibility Criteria and standard conditions for Petroleum Pipeline Activities.</p>
If the application is a variation application— does the application state the standard conditions for the activity or authority the applicant seeks to change?	N/A	The application is a site-specific application
For prescribed ERA's only, does the application state whether the applicant wants any EA granted for the application to take effect on a day nominated by the applicant.	NA	The applicant does not state a date they want the EA to take effect as the application is not for a prescribed ERA.
Does the application include any other document relating to the application prescribed under a regulation?	No	<p>No other documents relating to the application were required under section 54 of the Environmental Protection Regulation 2008.</p> <p>There are no wetlands of international or national importance within the proposed pipeline corridor. Additionally, no release of waste or waters to wetlands or groundwater has been proposed.</p>

Additional Requirements for Variation or Site-Specific Applications (Section 125(1)(l))	Yes/ No N/A	Justification (if required)
<p><i>Note 1: If the application is a variation application, it need only include the matters mentioned in section 125(1)(l) to the extent it seeks to change the standard conditions for the activity or authority (Section 125(2)).</i></p> <p><i>Note 2: Section 125(1)(l) does not apply for an application if—</i></p> <p><i>(a) the EIS process for an EIS for each relevant activity the subject of the application has been completed; and</i></p> <p><i>(b) an assessment of the environmental risk of each activity would be the same as the assessment in the EIS.</i></p> <p><i>(Section 125(3)).</i></p>		

Assessment checklist for an application for an environmental authority

Additional Requirements for Variation or Site-Specific Applications (Section 125(1)(l))	Yes/ No N/A	Justification (if required)
Does the application include an assessment of the likely impact of each relevant activity on the environmental values, including:		
i. a description of the environmental values likely to be affected by each relevant activity?	Yes	Description of the following environmental values has been provided in Section 5 of the Supporting Information: ESAs, Queensland Protected Areas, bioregions, landform, soil, flora, fauna, water and air.
ii. details of any emissions or releases likely to be generated by each relevant activity?	Yes	Details of emissions or releases have been provided in Sections 5 & 6 of the Supporting Information. Details of releases treated sewage effluent has been provided in the Additional Information document received on 12 October 2015 (eDocs no. 4201632 and 4201633).
iii. a description of the risk and likely magnitude of impacts on the environmental values ?	Yes	Details of risk and impacts to environmental values have been provided in Section 6 of the Supporting Information. Details of the risk and likely magnitude of impacts to environmental values from sewage treatment has been provided in the Additional Information document received on 12 October 2015 (eDocs no. 4201632 and 4201633).
iv. details of the management practices proposed to be implemented to prevent or minimise adverse impacts?	Yes	Environmental management and mitigation measures have been provided in Section 7 of the Supporting Information. Section 7.2 and 7.3 of the Supporting Information which provides control strategies, performance criteria, monitoring, records and corrective actions regarding sewage treatment. Details of management practices proposed to be implemented to prevent or minimise adverse impacts from irrigation of treated sewage effluent has been provided in the Additional Information document (eDocs no. 4201632 and 4201633) which the applicant provided on 12 October 2015.
v. details of how the land the subject of the application will be rehabilitated after each relevant activity ceases?	Yes	Rehabilitation measures are described in Section 7.5 of the Supporting Information.

Assessment checklist for an application for an environmental authority

Additional Requirements for Variation or Site-Specific Applications (Section 125(1)(l))	Yes/ No N/A	Justification (if required)
Does the application include a description of the proposed measures for minimising and managing waste generated by each relevant activity?	Yes	Waste management is described in Section 7.10 of the Supporting Information.
Does the application include details of any site management plan that relates to the land the subject of the application?	Yes	The land subject to the application does not have a site management plan as described in Section 4 of the application form.

Part C – Additional assessment considerations for site-specific applications – CSG activities

Part C relates to the assessment of the additional requirements for site-specific applications – CSG activities, under section 126. The **headings in bold** are mandatory requirements under section 126. The requirements under these headings represent the minimum information required to address the mandatory requirement. The requirements under these headings **MUST** be answered "Yes" for the application to be properly made. Where a requirement is answered "No", include a justification /explanation of why the information is not satisfactory.

Requirements for Site-Specific Applications – CSG Activities (Section 126)	Yes/ No N/A	Justification (if required)
Does the application detail the quantity of CSG water the applicant reasonably expects will be generated in connection with carrying out each relevant CSG activity (s126(1)(a))?	NA	The application does not relate to CSG activities.
Does the application state the volumes produced for each year over the life of the project?	NA	The application does not relate to CSG activities.
Does the application state the volumes grouped by activity type (i.e. exploration, appraisal and production)?	NA	The application does not relate to CSG activities.
Does the application state the flow rate at which the applicant reasonably expects the CSG water will be generated (s126(1)(b))?	NA	The application does not relate to CSG activities.
Does the application state flow rates generated for each year over the life of the project?	NA	The application does not relate to CSG activities.
Does the application state flow rates grouped by activity type (i.e. exploration, appraisal and production)?	NA	The application does not relate to CSG activities.
Does the application state the quality of the water, including changes in the water quality the applicant reasonably expects will happen while each relevant CSG activity is carried out (s126(1)(c))?	NA	The application does not relate to CSG activities.
CSG water quantified by:		
i. pH	NA	The application does not relate to CSG activities.

Assessment checklist for an application for an environmental authority

Requirements for Site-Specific Applications – CSG Activities (Section 126)	Yes/ No	Justification (if required)
ii. electrical conductivity	NA	The application does not relate to CSG activities.
iii. turbidity	NA	The application does not relate to CSG activities.
iv. total dissolved solids	NA	The application does not relate to CSG activities.
v. temperature	NA	The application does not relate to CSG activities.
vi. dissolved oxygen	NA	The application does not relate to CSG activities.
vii. alkalinity (bicarbonate, carbonate, hydroxide and total as CaCO ₃)	NA	The application does not relate to CSG activities.
viii. anions (bicarbonate, carbonate, hydroxide, chloride, sulphate)	NA	The application does not relate to CSG activities.
ix. cations (aluminium, calcium, magnesium, potassium, sodium)	NA	The application does not relate to CSG activities.
x. silica	NA	The application does not relate to CSG activities.
xi. dissolved and total metals and metalloids (including but not necessarily being limited to: aluminium, arsenic, barium, borate (boron), cadmium, chromium III, copper, iron, fluoride, lead, manganese, mercury, nickel, selenium, silver, strontium, tin and zinc)	NA	The application does not relate to CSG activities.
xii. total phosphorus	NA	The application does not relate to CSG activities.
xiii. ammonia, nitrate, nitrite as nitrogen	NA	The application does not relate to CSG activities.
xiv. total petroleum hydrocarbons	NA	The application does not relate to CSG activities.
xv. BTEX (as benzene, toluene, ethylbenzene, ortho-xylene, para-xylene, meta-xylene and total xylene)	NA	The application does not relate to CSG activities.
xvi. polycyclic aromatic hydrocarbons (including but not necessarily being limited to naphthalene, phenanthrene, benzo[a]pyrene)	NA	The application does not relate to CSG activities.

Assessment checklist for an application for an environmental authority

Requirements for Site-Specific Applications – CSG Activities (Section 126)	Yes/ No	Justification (if required)
xvii. gross alpha + gross beta or radionuclides by gamma spectroscopy	NA	The application does not relate to CSG activities.
Does the application describe the biological, carcinogenic, mutagenic or toxic properties of the CSG water (particularly with reference to those elements which have exceeded trigger levels in published guidelines)?	NA	The application does not relate to CSG activities.
Does the application describe the changes in the quality of CSG water that the applicant reasonably expects will happen while the activity is carried out?	NA	The application does not relate to CSG activities.
Does the application include an explanation of the variation of chemical concentrations as a result of chemical reactions over time (e.g. changes between extraction, storage, treatment and discharge (as relevant))?	NA	The application does not relate to CSG activities.
Does the application describe the proposed management of the CSG water including, for example, the use, treatment, storage or disposal of the water (s126(1)(d))?	NA	The application does not relate to CSG activities.
Does the application have regard to the management of CSG water produced as part of a CSG activity which is carried out as a single integrated operation?	NA	The application does not relate to CSG activities.
Does the application identify all water management infrastructure associated with the CSG activity?	NA	The application does not relate to CSG activities.
Does the application demonstrate that all reasonable measures have been considered to minimise the footprint of water management infrastructure (e.g. dams)?	NA	The application does not relate to CSG activities.
Does the application describe how CSG water will be aggregated and stored and kept separate from other waters (surface and groundwater) until it is used, treated, distributed or disposed of?	NA	The application does not relate to CSG activities.
Does the application describe how CSG water will be dealt with in accordance with the prioritisation hierarchy for managing and using CSG water as provided for in the CSG Water Management Policy 2012?	NA	The application does not relate to CSG activities.
Does the application include a complete project water balance, which includes:		
i. volumes of CSG water extracted	NA	The application does not relate to CSG activities.

Assessment checklist for an application for an environmental authority

Requirements for Site-Specific Applications – CSG Activities (Section 126)	Yes/ No	Justification (if required)
ii. volumes of CSG water to be stored in aggregation dams	NA	The application does not relate to CSG activities.
iii. volumes of CSG water to be treated via identified water treatment processes	NA	The application does not relate to CSG activities.
iv. direct rainfall into storages	NA	The application does not relate to CSG activities.
v. evaporative losses from storages	NA	The application does not relate to CSG activities.
vi. volumes of CSG water after treatment	NA	The application does not relate to CSG activities.
vii. volumes of concentrated waste streams including brine	NA	The application does not relate to CSG activities.
Does the application describe the quantity of CSG water that will be dealt with under each water management option?	NA	The application does not relate to CSG activities.
Does the application describe how the volumes of the CSG water change over the life of the project?	NA	The application does not relate to CSG activities.
Does the application evaluate the capacity (utilising the project water balance) of the water management system in response to changes in CSG production temporally (e.g. seasonal variations if applicable) and spatially (e.g. across the project area)?	NA	The application does not relate to CSG activities.
Does the application contain a general description of the environmental values to be protected?	NA	The application does not relate to CSG activities.
Where management options are still being investigated, does the application describe the detail of any pilot programs or trials for CSG water management options, including:		
i. objectives of the project	NA	The application does not relate to CSG activities.
ii. key deliverables of the project	NA	The application does not relate to CSG activities.
iii. project timelines	NA	The application does not relate to CSG activities.
iv. quantity and quality of CSG water to be used	NA	The application does not relate to CSG activities.
v. location / area relevant to the project	NA	The application does not relate to CSG activities.

Assessment checklist for an application for an environmental authority

Requirements for Site-Specific Applications – CSG Activities (Section 126)	Yes/ No	Justification (if required)
vi. duration of the pilot program / trial	NA	The application does not relate to CSG activities.
vii. discussion around authorisation in existing EA and any additional authorisations required.	NA	The application does not relate to CSG activities.
Has aquifer injection (including substitution) been considered?	NA	The application does not relate to CSG activities.
Has the feasibility of injection been determined in accordance with EHP's "Application Requirements for Petroleum Activities - Guideline" EM705 pp. 30-33?	NA	The application does not relate to CSG activities.
If an injection feasibility assessment has not been completed, does the application include commitments, actions and milestones to determine the feasibility of injection?	NA	The application does not relate to CSG activities.
Has substitution been considered?	NA	The application does not relate to CSG activities.
Has the assessment of substitution demonstrated that a reduction in groundwater take is certain?	NA	The application does not relate to CSG activities.
Has any beneficial use been considered?	NA	The application does not relate to CSG activities.
Has the location (by tenure type and / or real property descriptions) been detailed?	NA	The application does not relate to CSG activities.
Has the type of proposed beneficial use been defined?	NA	The application does not relate to CSG activities.
Does the application clarify the duration of the proposed beneficial use project/s?	NA	The application does not relate to CSG activities.
Has the landowner and title details of the location of the proposed beneficial use been identified?	NA	The application does not relate to CSG activities.
Does the application include a description of the environmental values of the receiving environment?	NA	The application does not relate to CSG activities.
Does the application include a description of the treatment technology to be used included in the design (including peak treatment capacities)?	NA	The application does not relate to CSG activities.
Does the application include a description of the location of any proposed treatment facilities included and identification of any sensitive receptors?	NA	The application does not relate to CSG activities.
Does the application include a description of the wastes generated as a result of the treatment process?	NA	The application does not relate to CSG activities.

Assessment checklist for an application for an environmental authority

Requirements for Site-Specific Applications – CSG Activities (Section 126)	Yes/ No	Justification (if required)
Does the application include a waste management arrangements for the by-products of the treatment process?	NA	The application does not relate to CSG activities.
Does the application include expected water quality acceptance criteria for the treatment facility?	NA	The application does not relate to CSG activities.
Does the application detail the quantity and quality of the water to be beneficially used?	NA	The application does not relate to CSG activities.
Does the application demonstrate that the quality of the water to be used is fit for purpose (e.g. reference to published guideline values for particular uses)?	NA	The application does not relate to CSG activities.
Does the application identify seasonal and timing issues associated with the beneficial reuse and contingencies (e.g. storage arrangements when unable to irrigate due to saturated soils)?	NA	The application does not relate to CSG activities.
Does the application include a detailed assessment of the environmental impacts and sustainability of the proposed beneficial use in the receiving environment (e.g. soil, water, nutrient and salt balances)?	NA	The application does not relate to CSG activities.
Does the application demonstrate that beneficial use can be carried out so as to prevent environmental impacts occurring?	NA	The application does not relate to CSG activities.
Does the application identify whether the beneficial use will be authorised under a general or specific beneficial use approval (BUA)?	NA	The application does not relate to CSG activities.
If a specific BUA is required, does the application detail the lodgement date and status of that application?	NA	The application does not relate to CSG activities.
If approved under an existing specific BUA, does the expiry of the BUA align with the conclusion of an injection feasibility study?	NA	The application does not relate to CSG activities.
If beneficial uses are proposed on tenure, are those uses consistent with the authorised and ancillary activities permitted under the tenure type(s) (as per the P&G Act)?	NA	The application does not relate to CSG activities.
Is a discharge to waters proposed?	NA	The application does not relate to CSG activities.
Has the legislative, environmental, technological, economic, and social requirements all been evaluated including:		
i. an assessment of best practice environmental management for managing the CSG water;	NA	The application does not relate to CSG activities.

Assessment checklist for an application for an environmental authority

Requirements for Site-Specific Applications – CSG Activities (Section 126)	Yes/ No	Justification (if required)
ii. alternative ways for managing the water have been discussed and ruled out with reasons provided;	NA	The application does not relate to CSG activities.
iii. an evaluation showing there is no feasible alternative to discharge to surface waters for managing the water.	NA	The application does not relate to CSG activities.
Does the proposal to discharge consider the management principles for disposing CSG water to watercourses found in <i>Table 1 – CSG water management options</i> of the “CSG Water Management Policy 2012”?	NA	The application does not relate to CSG activities.
Does the proposed discharge consider the management criteria for disposing CSG water to watercourses found in <i>Table 1 – CSG water management options</i> of the “CSG Water Management Policy 2012”?	NA	The application does not relate to CSG activities.
Does the proposal to discharge consider: <ul style="list-style-type: none"> i. any relevant Water Resource Plan objectives and outcomes ii. the Murray Darling Basin Salinity Strategy (for Queensland Murray Darling Basin region only) iii. the Commonwealth <i>Water Act 2007</i> iv. the <i>Water Supply (Safety and Reliability) Act 2008</i> v. the Commonwealth <i>Environmental Protection Biodiversity and Conservation Act 1999</i> vi. the cumulative impact of the proposed release on any relevant State and Federal agreements (e.g. no net increase to salt loads entering other jurisdictions under the Basin Salinity Management Plan to which Queensland is a signatory) 	NA	The application does not relate to CSG activities.
Does the proposal to discharge include a description of: <ul style="list-style-type: none"> i. the potential contaminants of concern in the proposed release? 	NA	The application does not relate to CSG activities.
ii. the characteristics of the proposed release including the concentrations, volume, loads and potential variability?	NA	The application does not relate to CSG activities.
iii. the location and configuration of the proposed release?	NA	The application does not relate to CSG activities.
iv. the proposed flow parameters of the release relevant to stream ecosystems including timing frequency, duration, magnitude, rate of rise and fall of flows; duration of no flows?	NA	The application does not relate to CSG activities.

Assessment checklist for an application for an environmental authority

Requirements for Site-Specific Applications – CSG Activities (Section 126)	Yes/ No	Justification (if required)
v. the cumulative impacts of CSG water releases on the flow regime and water quality for ecosystem health and public health requirements?	NA	The application does not relate to CSG activities.
vi. the spatial and temporal extent of impacts to stream water quality and stream flow regime including assessment of impacts on 'no flow periods'?	NA	The application does not relate to CSG activities.
vii. the best practicable measures used to avoid or minimise the release (e.g. best practice, source reduction)?	NA	The application does not relate to CSG activities.
viii. the receiving environment in terms of water bodies potentially affected, consideration of ephemeral streams, other sources and loads of relevant contaminants in the catchment?	NA	The application does not relate to CSG activities.
ix. how the release regime is going to meet the management goals of the receiving water, ensure the protection of the environmental values and compliance with the water quality objectives (WQO) for the receiving water?	NA	The application does not relate to CSG activities.
x. the background water quality conditions of the receiving waters including an assessment of the monitoring results for all key water quality monitoring parameters for the last 3 to 5 years, upstream and down stream of the release point or a longer period to take into account the range of natural variability of the receiving waters?	NA	The application does not relate to CSG activities.
xi. the predicted outcomes or impacts of the proposed release, e.g. consider an mixing zone, predict the assimilative capacity of the receiving environment, indirect impacts?	NA	The application does not relate to CSG activities.
xii. a receiving environment monitoring program or other reporting programs?	NA	The application does not relate to CSG activities.
Does the application include measurable criteria (the <i>management criteria</i>) against which the applicant will monitor and assess the effectiveness of the management of the water, including, for example, criteria for each of the following:	NA	
i. the quantity and quality of the water used, treated, stored or disposed of;	NA	The application does not relate to CSG activities.
ii. protection of the environmental values affected by each relevant CSG activity;	NA	The application does not relate to CSG activities.

Assessment checklist for an application for an environmental authority

Requirements for Site-Specific Applications – CSG Activities (Section 126)	Yes/ No	Justification (if required)
iii. the disposal of waste, including, for example, salt, generated from the management of the water (s126(1)(e))	NA	The application does not relate to CSG activities.
<p>Does the application include management objectives for both the quantity and quality of the water at critical control points across the entire water management system?</p> <p><i>For example:</i></p> <ul style="list-style-type: none"> o <i>transmission via pipelines at all stages in the CSG water management system;</i> o <i>effective storage of untreated and treated CSG water in sumps and dams, including their throughput rates;</i> o <i>treatment of CSG water and water quality acceptance criteria;</i> o <i>injection to aquifers;</i> o <i>beneficial reuse;</i> o <i>discharge to surface waters (if applicable);</i> o <i>management and disposal of any wastes including brine and salt which is produced from the management of CSG water.</i> 	NA	The application does not relate to CSG activities.
Does the application state the contaminants expected to be present at critical control points across the entire water management system?	NA	The application does not relate to CSG activities.
Do the management criteria identify and include the environmental values to be protected by achieving each management objective?	NA	The application does not relate to CSG activities.
Have all of the potential impacts of the proposal been considered taking into account human uses and the required biological integrity to protect the value?	NA	The application does not relate to CSG activities.
Have environmental values been identified in accordance with the Environmental Protection Regulation 2008 and environmental protection policies?	NA	The application does not relate to CSG activities.
Are there criteria for the disposal of waste, including, for example, salt generated from the management of the water (including management objectives, environmental values, tasks and performance indicators)?	NA	The application does not relate to CSG activities.
Are performance indicators auditable (i.e. quantitative and able to be objectively and repeatedly measured by defined methodologies)?	NA	The application does not relate to CSG activities.
Where monitoring is required for performance indicators, does the application include:		
i. details of monitoring locations, frequency, parameters and testing methodologies;	NA	The application does not relate to CSG activities.

Assessment checklist for an application for an environmental authority

Requirements for Site-Specific Applications – CSG Activities (Section 126)	Yes/ No	Justification (if required)
ii. monitoring which in practice, will be able to identify any failures and / or poor performance of any aspect of the CSG water management system;	NA	The application does not relate to CSG activities.
iii. monitoring, which in practice, will trigger investigations into the identified failures and / or poor performance;	NA	The application does not relate to CSG activities.
iv. monitoring, which in practice, will allow for continuous improvement in CSG water management over the life of the project.	NA	The application does not relate to CSG activities.
Does the application describe the procedures that will be adopted to regularly review and update the measurable criteria?	NA	The application does not relate to CSG activities.
Does the application include actions proposed to be taken if any of the management criteria are not complied with, to ensure the criteria will be able to be complied with in the future (126(1)(f))?	NA	The application does not relate to CSG activities.
Does the application include the proposed or current use of a CSG evaporation dam?	NA	The application does not relate to CSG activities.
If yes, does: i. the application include an evaluation of best practice environmental management for managing the CSG water? ii. the application include an evaluation of alternative ways for managing the water?; and iii. the evaluation shows there is no feasible alternative to a CSG evaporation dam for managing the water (s126(2))?	NA	The application does not relate to CSG activities.
Does the application identify all proposed evaporation dams by name, location (GPS), purpose, surface area and storage volume and have existing construction and containment standards, including leak detection been described?	NA	The application does not relate to CSG activities.
If the application provides for exploration and / or appraisal evaporation ponds, does it adequately demonstrate that:		
i. the expected water quality and quantity is uncertain	NA	The application does not relate to CSG activities.
ii. the infrastructure at and access to, the well site is limited	NA	The application does not relate to CSG activities.

Assessment checklist for an application for an environmental authority

Requirements for Site-Specific Applications – CSG Activities (Section 126)	Yes/ No	Justification (if required)
iii. the well site is remote to the rest of the project activities	NA	The application does not relate to CSG activities.
iv. the expected volume of CSG water, relative to the location of the exploration or appraisal activities and CSG regions has been considered in sizing the dam	NA	The application does not relate to CSG activities.
v. the maximum projected quantity of water to be stored in the CSG evaporation dam, for the entirety of the exploration and appraisal activities, will be less than 100 mega litres	NA	The application does not relate to CSG activities.
vi. the proposed CSG evaporation dam will be less than 5 hectares in size	NA	The application does not relate to CSG activities.
vii. there is a physical barrier, tenure constraint or factor of remoteness involved (e.g. >50 kilometres) that prevents exploration or appraisal wells or group of wells from being connected to other water treatment or disposal facilities	NA	The application does not relate to CSG activities.
viii. the risk of damage to the physical integrity of the dam is minimised by its design and location	NA	The application does not relate to CSG activities.
Does the application provide for an annual re-evaluation of each proposed evaporation dam?	NA	The application does not relate to CSG activities.
Does the application provide details on the management or disposal options for saline effluent and solid salt residues based on the prioritisation hierarchy for managing saline waste in the "CSG Water Management Policy 2012"?	NA	The application does not relate to CSG activities.
Does the proposed salt management proposal consider the management principles and criteria in <i>Table 2 – Salt and brine waste management options</i> of the "CSG Water Management Policy 2012"?	NA	The application does not relate to CSG activities.
If the application proposes a less prioritised option for brine or solid salt residue management, does the EA holder sufficiently demonstrate why each of the proposed options are not feasible?	NA	The application does not relate to CSG activities.
Where management options are still being investigated, does the application describe the detail of any pilot programs or trials for CSG water management options, including:		
i. objectives of project?	NA	The application does not relate to CSG activities.
ii. key deliverables of the project?	NA	The application does not relate to CSG activities.

Assessment checklist for an application for an environmental authority

Requirements for Site-Specific Applications – CSG Activities (Section 126)	Yes/ No	Justification (if required)
iii. project timelines?	NA	The application does not relate to CSG activities.
iv. quantity and quality of brine / solid salt residues to be used?	NA	The application does not relate to CSG activities.
v. location / area relevant to the project?	NA	The application does not relate to CSG activities.
vi. duration of pilot program / trial?	NA	The application does not relate to CSG activities.
Has the applicant considered the prioritisation hierarchy for managing and using CSG water and <i>Table 1 – CSG Water Management Options</i> in the "CSG Water Management Policy 2012"?	NA	The application does not relate to CSG activities.
If a management option that is not consistent with the prioritisation hierarchy is proposed to be used by the applicant, has the reason for using the non-prioritised management option been provided?	NA	The application does not relate to CSG activities.

Part D – Discussion

Use Part D if further discussions are required in relation to the content of the application.

Fees matter:

- The applicant provided a purchase order with the application for the correct fee amount of \$24,818.25. The applicant requested EHP to provide a reference number which would enable them to pay the fee via Electronic Fund Transfer (EFT) (eDocs no.4193345). PaLM had previously provided advice to the applicant that the applicant could pay the fees via EFT (eDocs no. 4195480).
- PaLM received the application on 25 September 2015 and forwarded the application package to P&G on 1 October 2015. However, PaLM did not provide the applicant with the requested reference number.
- On 6 October 2015, P&G sent an email to PaLM requesting them to follow up on the fees and provide receipt to P&G when the correct fee was paid (eDocs no.4193280).
- On 7 October 2015, PaLM advised P&G that application fees cannot be paid via EFT and that PaLM will contact the applicant to receive payment in another acceptable form.
- On 12 October 2015, the applicant paid the fees via credit card.

Offsets:

The application states that "where required, significant impact to vegetation will be offset in accordance with the *Queensland Environmental Offsets Policy (Version 1.1)*". No other information has been provided by the proponent in relation to Offsets.

EIS:

As per "Guideline: Triggers for environmental impact statements (EIS) under the Environmental Protection Act 1994 for mining and petroleum activities" EIS triggered when:	PPL2015 - NEGI pipeline
• total disturbance area greater than 2000 hectares at any one time during the life of the proposed activity	The total area of disturbance due to the NEGI pipeline will be 540.1 ha.

Assessment checklist for an application for an environmental authority

<ul style="list-style-type: none"> • involve the construction of a high pressure pipeline over a distance of 300 kilometres or greater 	Total length of the NEGI pipeline will be 165km.
<ul style="list-style-type: none"> • involve the construction of a liquefied natural gas plant 	NEGI pipeline does not involve the construction of a LNG plant.

Therefore, no EIS is required for this activity.

Part E – Recommendation

After completing the list above, mark which of the following applies:

☐ The application does not meet the mandatory requirements of the EP Act and it is recommended the application not be accepted as properly made. A completed s128 notice to the applicant is attached which includes the stated reasons, for delegate's signature.
OR
☐ The application is a variation or site-specific application. The information within the application meets the mandatory requirements for a properly made application but is not detailed enough to enable a proper assessment. Further information will be required through a subsequent section 141 notice to the applicant.
OR
☒ The application meets the mandatory requirements of the EP Act, is properly made and assessment can proceed without a request for information.

Assessing Officer

Sign: _____ 49-Sch4 - Signature _____ Date: 14/10/15
 Name: **Radhika Rao**
 Position: **Senior Environmental Officer (Assessment)**

Delegate

Recommendation/s: APPROVED / NOT APPROVED

 Sign: _____ 49-Sch4 - Signature _____ Date: 14 Oct 2015
 Name: **Pippa McLeod**
 Position: **Manager (Assessment)**

Environmental Support Officer

☐ Signed correspondence (including notices) scanned, filed and posted to client

Assessment checklist for an application for an environmental authority

☐ Ecotrack and all tracking documents updated

Sign: _____

Date: _____

Name: _____

Position: _____

EHP RTI DL Release

PPL2015 – Jemena North East Gas Interconnector (NEGI) Pipeline
Meeting agenda to discuss application during information request stage

1. Information request notice is due on 9 November 2015
2. Will offsets be required?
3. Is Environmentally Sensitive Area (ESA) table from Streamline Model Condition suitable?
4. Does EHP only need to consider MSES? Jemena will submit an EPBC referral to the Department of Environment. There are 2 MNES within the Planning Corridor – threatened species and migratory species. Jemena concludes that neither will be significantly impacted by the development as the construction is over a short period, the area will be rehabilitated following construction and linear nature of project affects small area of habit on the landscape scale.

Prescribed activities - Schedule 1 - Activities prescribed for section 9(c) of the Offsets Act
1 a resource activity carried out under an environmental authority under the *Environmental Protection Act 1994* for which an amendment application, a site-specific application or a variation application was made under that Act

Prescribed environmental matters - Schedule 2 - 2 Regulated vegetation

- (1) The prescribed regional ecosystems that are endangered regional ecosystems comprise a matter of State environmental significance.
- (2) The prescribed regional ecosystems that are of concern regional ecosystems comprise a matter of State environmental significance.
- (3) A prescribed regional ecosystem is a matter of State environmental significance if it is—
 - (a) a regional ecosystem that intersects with an area shown as a wetland on the vegetation management wetlands map (to the extent of the intersection); or
 - (b) an area of essential habitat on the essential habitat map for an animal that is endangered wildlife or vulnerable wildlife or a plant that is endangered wildlife or vulnerable wildlife.

Endangered – Gouldian Finch, Red Goshawk,

Vulnerable – Purple-necked rock wallaby, Northern leaf-nosed bat, Ghost bat, Orange leaf-nosed bat, Australian painted snipe, Painted honeyeater, Yellow Chat

ESA Regional Ecosystem (RE) to be disturbed:

- Cat B: Endangered = 16.56ha;
- Cat C: Of concern = 292.56ha

RE1.3.7 – Endangered – Riverine wetland

Permanent disturbance footprint = 17.29ha = 415m x 415m

- Unclear whether any of this permanent disturbance will be in ESA. Permanent disturbance will be: access tracks, compressor station x 1, Mainline valve x 1, cathodic protection station.
- Application states that “final pipeline alignment is likely to intersect both Endangered and Of Concern RE”.
- Will offsets be required if ESA disturbance is not permanent? E.g. Pipeline ROW is rehabilitated? Refer to page 10, Offsets general guide.
- The Offsets Policy states that an environmental offset can only be required if residual impacts from a prescribed activity constitute a significant residual impact.
- Confirm that offset (land-based or payment) is made after the impact has occurred.

Next:

- Contact RSRS for advice regarding offsets
 - Clarify with Jemena whether pipeline can go around the Cat B ESA (endangered RE) and Cat C ESA (timber reserve), (essential habitat), (essential regrowth habitat), (of concern)
 - Offer ESA table from SMS to Jemena and ask whether the table will suffice. If not, offsets may be required and SMC conditions Biodiversity 8B – 13.
 - Check with RSRS for current offsets conditions
 - Clarify whether permanent disturbance will be within ESAs?
-

Questions & answers arising out of discussion above held on 29Oct15:

- Are watercourses within ESAs?
 - Pipeline will intersect endangered regional ecosystem RE1.3.7 – Riverine wetland or fringing riverine wetland (category B ESA)
- P&G will only authorise 300EP limit in STP conditions
 - EA conditions have been drafted limiting STP to 300EP
- Clarify why 6 STP units are required (each container unit is suitable for up to 50 persons)
 - There will be five temporary accommodation camps in total but only one in Queensland. There will be a maximum on 140 people in the Queensland camp.
- Check whether Surface Coating is required
 - No information has been provided regarding Surface Coating (ERA38)
 - Discuss ERA 38 thresholds with Team Leader
- Check biodiversity conditions
 - Biodiversity conditions from SMC (as per Charlie EA) have been applied to EA. Awaiting feedback from RSRS following Offsets meeting to finalise
- Check why QGC Charlie pipeline was site-specific
 - Charlie did not meet eligibility criteria as they required chemical storage
- Check if borrow pits are required
 - No information provided on borrow pits
- Check Decision Notice template and grounds required
 - No current template found on ecosteps but located template on ecotrack
 - Copy of decision notice for PL509 has used the “grounds for decision” format
- Check for Information request template
 - Nothing available on ecosteps but located template on ecotrack

Information described below can be used to request details in relation to MSES disturbance if applicant proposes such disturbance and to determine offsets requirements. This information was not requested off the applicant as they did not have a final pipeline alignment available. Once the applicant receives an EA, they would receive the tenure from DNRM and be able to carry out ground truthing works to determine the exact location of disturbances.

Radhika Rao
10 November 201

- a) Pursuant to section 207(1)(c) of the *Environmental Protection Act 1994*, the administering authority is required to consider imposing conditions on an EA that may require or otherwise relate to an environmental offset (environmental offset condition)

Section 5.1 of the supporting information proposes disturbance within category B and C environmentally sensitive areas (ESAs) and states that the final pipeline alignment is likely to intersect multiple areas of regional ecosystems (REs) with 'endangered' and 'of concern' biodiversity statuses. The application states that impacts to ESAs will be minimised, rehabilitated and offset where required. However, the supporting information does not provide sufficient information to enable the administering authority to determine whether any offsets requirements for PPL 2015 should be required through a condition imposed on the EA.

As such, the administering authority requests Jemena:

- i. Identify all prescribed environmental matters that are matters of state environmental significance (MSES) that may potentially be impacted by PPL2015;

Note – The Landscape Fragmentation and Connectivity Tool, available at the website listed below, may assist in determining the significance of any proposed impacts on connectivity areas containing remnant vegetation;

- ii. Describe the likely significance of proposed impacts to each MSES and determine whether there will be any significant residual impacts;
- iii. Provide a maximum extent of significant residual impact (in hectares) for each proposed MSES to be impacted;
- iv. Describe if an environmental offset is likely to be available to counterbalance any significant residual impacts to a MSES as described above; and
- v. Provide a GIS shapefile for PPL2015.

To assist you in providing the above information, the following documents are linked from the Queensland Government's website (<http://www.qld.gov.au/environment/pollution/management/offsets>):

- Queensland Environmental Offsets Policy – General guide
- *Environmental Offsets Act 2014*
- Environmental Offsets Regulation 2014
- Queensland Environmental Offsets Policy, Version 1.1
- Queensland Environmental Offsets Policy – Significant Residual Impact Guideline