

No.	General		
1	Proposed Amendments	<p>It is understood the proposed amendment seeks the following:</p> <ul style="list-style-type: none"> • Authorise the surface disturbances for the following approved infrastructure that will result in impacts to Environmentally Sensitive areas (ESA), ESA buffers and Prescribed Environmental Matters (PEMs) <ul style="list-style-type: none"> o 39 wells; o Pipeline corridors; o Access tracks; o Laydown areas; o Temporary camps and sewage treatment plants and irrigation; o Surveys; o Communication systems; and o Incidental petroleum activities. <p>Proposed condition amendments:</p> <ul style="list-style-type: none"> • Administrative amendments to update current editions of environmental protection regulation; • Administrative amendments to remove conditions no longer required to be authorised under this EA due to de-amalgamation; • Amend ESA table (Schedule D Table 2) and PEMs table (Schedule D Table 3) and related conditions; 	Noted – No updates to the application required.
2	Application of s139 and s150 of the Environmental Protection Act 1994.	<p>Section 139 of the Environmental Protection Act 1994 (EP Act) states that an information request does not apply in particular circumstances.</p> <p>Section 139 (2) states that section 139 applies only if, the matters mentioned in section 125(1)(l) have been provided to the administering authority (whether with the application, through the EIS or in another way).</p> <p>The Department of Environment and Science (the department) considers that information required by section 125(1)(l) has not been previously provided (whether through the EIS or other) in relation to the proposed amendments. As such, the information request will apply to the proposed amendment, provided the assessment level decision is that the amendment is a major amendment.</p> <p>Section 150 of the EP Act states that public notification does not apply in particular circumstances.</p> <p>Section 150(1)(c) states that section 150 applies if: since the EIS, the environmental risks of the relevant activity and the way it will be carried out have not changed; or the administering authority is satisfied the change would not be likely to attract a submission objecting to the change.</p> <p>The department considers that the environmental risks of the relevant activity had changed and that the change may attract a submission objecting to the changed.</p> <p>As such, provided the assessment level decision for the proposed amendment is a major amendment, then public notification will be required.</p>	Noted – No updates to the application required.
3	Proposed disturbances and infrastructure	<p>It is recommended spatial data for disturbance is provided as part of the application.</p> <p>The proposed amendment seeks authorisation for disturbance to Prescribed Environmental Matters and Environmentally Sensitive Areas (PEMs and ESAs).</p>	Noted. Acknowledge this may be addressed through the processing of the application.
4	Environmental Values	<p>Biodiversity and ESA values have been provided, however other environmental values (EVs) have not been provided. Arrow are currently not authorised for the extent of clearing proposed in this application. Clearing presents dust, noise, water and land impacts that have not yet been discussed. To satisfy the requirements for a properly made application further detail is required on EVs or provide a statement and sufficient justification that there will be no impacts to environmental values.</p>	Arrow have updated section 5 to also include the values not expected to be impacted by this amendment application.

5	Offsets mitigation hierarchy	<p>Justification on how the offsets mitigation hierarchy has been applied in determining the location of disturbance. Justification must be presented in a detailed and considered way to support the proposed amendment on how the avoid and mitigate measures have been applied.</p>	<p>Section 1.3 has been updated to clarify that PL194 includes the State Forest, and the tenure is awarded subject to meeting obligations included in a development plan approved by DoR.</p> <p>Arrow have updated section 6.4 to include examples of where the hierarchy has been implemented.</p> <p>Section 7.3 explains that some clearing of remnant vegetation is required to enable the resource to be brought to surface.</p>
6	Specific statements	<p>Please ensure specific statements are provided to justify amendments and to support biodiversity impact conclusions. For example the use of 'limited' when referring to the presence of habitat features or 'small' when referring to impact areas. As a further example, the following statement referenced in the supporting information by Ecosmart (2017) does not provide information relevant to the current status of the site and the matters that require protection:</p> <p>"While, on balance, the State Forests have retained greater conservation value than vegetation on freehold land, the future of these areas may be affected by changes to fire regime. Within the last 10 years, three extremely hot fires have affected large expanses of State Forest within the SGP study area, and in the case of Kumbarilla State Forest on more than one occasion...These hot fires can cause significant damage to the canopy and vegetation composition (by removing fire-sensitive species). It is likely the vegetation will take many decades to fully recover after a significant wildfire. The frequency and intensity of wildfires are predicted to increase due to climate change (Williams et al. 2001), possibly leading to possible broad-scale vegetation changes."</p> <p>This comment does not identify whether fires have occurred in Dalby State Forest, to what extent there are damages, whether there are habitat features remaining such as tree hollows etc.</p> <p>Note: the definition of habitat according to the Nature Conservation Act 1992 states 'habitat of wildlife includes an area that is not presently occupied by the wildlife.'</p>	<p>Noted – are unable to request a third party amend a comment in their report.</p>
7	Biodiversity 8B	<p>Table 2 – Maximum significant disturbance in environmentally sensitive areas and their protection zones is not a 'despite' table. The wording of this condition and table requires compliance with both Table 1 and Table 2. Therefore, this current table is not providing authorisation for the disturbance. Impacts to environmentally sensitive areas (ESAs) must be quantified per ESA trigger in the application so that specific authorisation, 'despite' Table 1, can be provided (example provided below). Despite condition xx activity may be located in << environmentally sensitive areas and/or their primary and/or their secondary protection zones>> as specified in Table X – Petroleum activity exemptions in environmentally sensitive areas.</p> <p>Table X – Petroleum activity exemptions in environmentally sensitive areas</p>	<p>Noted - Arrow are seeking an alternative to the coordinate approach through this amendment application.</p> <p>Section 7.3 has been updated to clarify the history of Schedule D, Table 2.</p>

Table X – Petroleum activity exemptions in environmentally sensitive areas

Tenure	Description of Infrastructure	Max Disturbance footprint (ha)	ESA Protection Zone	Coordinates
<i>e.g., PL276</i>	<i>e.g., Gas Trunkline – Alfred FCS to Petrie Creek CPP</i>		<i>e.g., PPZ and SPZ of Category B ESA</i>	<i>e.g., -26.289358, 149.720436 -26.29579, 149.7563</i>

It is noted that the current Table 2 sets a maximum significant disturbance in ESAs and their protection zone as 0 ha for impacts in Cat B ESAs, Cat B protection zones Cat C ESAs and Cat C protection zones. As the activities authorised under Biodiversity 8A and Schedule D, Table 1 must not exceed the maximum footprint in schedule D, Table 2, provide confirmation that no impacts, including essential petroleum activities, have occurred within the ESAs and protection zones within PL194 to date and this amendment is not retrospectively seeking approval. Additionally, can context be provided as to why Cat B ESAs and protection zone of Cat B ESAs and protection zone of Cat C ESAs have not been included in the proposed amendment to table 2.

8	Biodiversity 8C	The proposed condition links ESAs and PEMs. While there are some cross-overs between ESAs and MSES, they have different definitions and are not considered like for like. ESAs and PEMs are not translatable, therefore this is not an appropriate proposal. The department does not support this proposed amendment.	Noted.
9	Protecting biodiversity values, Table 3 — Significant residual impacts to prescribed environmental matters	Protecting biodiversity values, Table 3 — Significant residual impacts to prescribed environmental matters: <ul style="list-style-type: none"> o Needs to reflect and make clear to what extent SRIs have already been authorised and undertaken. o Include areas that are to be offset. Where seeking impacts to MSES, ensure all MSESs are identified and quantified, regardless of whether a significant residual impact (SRI) is considered likely. The current table identifying SRI to PEMs should be replaced with a table that confirms what MSES impacts have been authorised (example template provided below). Include detailed justification for each removal or amendment of areas of impact from PL194 from what is currently approved in Table 3.	Add to Section 8 of the Supporting Information Report has been updated to clarify prior impacts were undertaken under a broader EA which was subsequently de-amalgamated. Any updates or amendments to the draft SRI report can be provided post approval of this amendment, and in accordance with existing condition Biodiversity 14.

		<p>Prescribed environmental matters - matters of State environmental significance</p> <p>Impacts to matters of State environmental significance (MSES) as a result of carrying out the activity must only occur within the locations and to the maximum extents stated in Table X – Authorised impacts to MSES.</p> <p>Table X – Authorised impacts to MSES</p> <table border="1" data-bbox="463 327 1181 1031"> <thead> <tr> <th data-bbox="463 327 706 464">Matters of State environmental significance</th> <th data-bbox="706 327 884 464">Location of impact</th> <th data-bbox="884 327 961 464">Significant residual impact</th> <th data-bbox="961 327 1026 464">Offset Required</th> <th data-bbox="1026 327 1181 464">Maximum extent of impact of total area on site</th> </tr> </thead> <tbody> <tr> <td colspan="5" data-bbox="463 464 1181 495">REGULATED VEGETATION</td> </tr> <tr> <td data-bbox="463 495 706 772">Endangered regional ecosystem – insert RE ID</td> <td data-bbox="706 495 884 772"> <i>Insert reference to map to be attached to the EA as an appendix showing locations and areas of residual impacts</i> OR <i>Insert coordinates</i> OR <i>Insert lot on plan, resource authorities or project areas.</i> </td> <td data-bbox="884 495 961 772">Yes/ No</td> <td data-bbox="961 495 1026 772">Yes/ No</td> <td data-bbox="1026 495 1181 772">X ha of Y total site ha</td> </tr> <tr> <td data-bbox="463 772 706 869">Of concern regional ecosystem (not within an urban area) – insert RE ID</td> <td data-bbox="706 772 884 869">as per above</td> <td data-bbox="884 772 961 869">Yes/ No</td> <td data-bbox="961 772 1026 869">Yes/ No</td> <td data-bbox="1026 772 1181 869">X ha of Y total site ha</td> </tr> <tr> <td data-bbox="463 869 706 1005">Regional ecosystems (not within an urban area) that intersect a wetland on the vegetation management wetlands map – insert RE ID</td> <td data-bbox="706 869 884 1005">as per above</td> <td data-bbox="884 869 961 1005">Yes/ No</td> <td data-bbox="961 869 1026 1005">Yes/ No</td> <td data-bbox="1026 869 1181 1005">X ha of Y total site ha</td> </tr> <tr> <td data-bbox="463 1005 706 1031">An area of essential</td> <td data-bbox="706 1005 884 1031"></td> <td data-bbox="884 1005 961 1031"></td> <td data-bbox="961 1005 1026 1031"></td> <td data-bbox="1026 1005 1181 1031"></td> </tr> </tbody> </table>	Matters of State environmental significance	Location of impact	Significant residual impact	Offset Required	Maximum extent of impact of total area on site	REGULATED VEGETATION					Endangered regional ecosystem – insert RE ID	<i>Insert reference to map to be attached to the EA as an appendix showing locations and areas of residual impacts</i> OR <i>Insert coordinates</i> OR <i>Insert lot on plan, resource authorities or project areas.</i>	Yes/ No	Yes/ No	X ha of Y total site ha	Of concern regional ecosystem (not within an urban area) – insert RE ID	as per above	Yes/ No	Yes/ No	X ha of Y total site ha	Regional ecosystems (not within an urban area) that intersect a wetland on the vegetation management wetlands map – insert RE ID	as per above	Yes/ No	Yes/ No	X ha of Y total site ha	An area of essential					
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10	Removal of conditions no longer required under this EA	Additional details are required to understand the removal of the condition. Justify why the condition is not required and there is no environmental risk.	Arrow have reviewed and confirmed Section 4 of the Supporting Information Report refers to Attachment 3 which contains the detailed justification for each amendment.																														
11	Table 9: Impacts to Environmentally Sensitive Areas	Clarification is needed on the methodology used to determine ESAs anticipated to be impacted in Table 9 Impacts to Environmentally Sensitive Areas in the supporting report.	<p>Section 7.1 has been updated to clarify that Environmentally Sensitive Areas (ESAs) have been determined in accordance with the existing EA which defines Category A, B and C ESAs.</p> <p>Section 7.3 has been updated to clarify the methodology for determining anticipated impacts to ESAs.</p>																														
12	Quantifying existing and proposed impacts	<p>Section 1.1.2 and 2.4.3 of the Queensland Environmental Offset Policy states that when an amendment to an existing authority is proposed, the significant residual impact assessment relates to the cumulative impacts of the entire project. i.e. impacts proposed in both the existing authority and any additional impacts proposed in the amendment.</p> <p>Provide details (including total area of disturbance) of all PEMs that have been impacted to date.</p>	See item 9.																														

		<p>A SRI assessment should consider the existing impacts to each PEM and the proposed impacts to each PEM for the significant residual impact assessment.</p> <p>Identify the extent of SRI already undertaken under PL194 and when they were approved and the estimated SRI as per condition Biodiversity 14 of the EA.</p>	
13	Acceptable impacts to MSES	<p>The supporting information includes a brief summary of avoidance and minimisation. Mitigation measures are detailed in the Species Impact Management Plan.</p> <p>The supporting information should also include:</p> <p>1. For each PEM that is proposed to be impacted you must demonstrate:</p> <p>a) that the impact is an acceptable impact (for example, an impact would not be considered reasonable or acceptable if it proposed to clear the last remaining habitat of a critically endangered species); and</p> <p>b) that the impact is necessary. Provide reasoning for how the benefits of those impacts outweigh the ecological disturbances.</p> <p>2. Where an offset is proposed, land-based or financial. You must demonstrate that it is feasible for an offset to be delivered. Even when a financial offset is proposed, these funds are provided to the department, in which the department must undertake the offset. It must be feasible for a land-based offset to be delivered for the proposed impact and PEM. A significant residual impact on a PEM may not be authorised if there is realistically no locations left to provide the offset.</p>	Additional information has been provided in Section 8.1
14	Protected Wildlife Habitat	<p>Flora and fauna Survey efforts</p> <p>Attachment 5: The Terrestrial Ecology Report (EcoSmart 2017) references flora and fauna assessments within or in close proximity to Surat Gas Project study area being conducted in 2009, 2011, 2013 and 2014.</p> <ul style="list-style-type: none"> • Provide further details of these flora and fauna surveys including any reports; • Confirm whether the fauna surveys meet the Guideline: Terrestrial Vertebrate Fauna Survey Guidelines for Queensland, and if not, provide justification for alternative methods used; • Confirm the dates the flora and fauna surveys were conducted; • Confirm the extent of survey efforts undertaken relevant to the proposed activity locations associated with this amendment. • The department notes that the most recent survey efforts are 6 years old in the Ecosmart 2017 report. There is mention in the Significant Residual Impacts to Prescribed Environmental Matters Report that ecological assessments were undertaken in 2018, 2019 and 2021 for the SGP area. Provide details on these assessments related to the area of proposed disturbance; • Describe any targeted species surveys conducted. There is mention in the supporting report that, Arrow has surveyed nearly 280 ha on PL194, split between Secondary, Site Validation, Flora and Fauna surveys, Koala surveys (240 trees) and Protected Plant Surveys (approx. 7 hours). Supply details on these surveys. 	Responses have been added to Section 6.1 of the Supporting Information Report to clarify the dates and methodology for surveys which have addressed the entire footprint. Further details on targeted surveys are provided in the EcoSmart Report.
15		<p>Connectivity</p> <p>Section 8.3 of the Supporting Report states that the Landscape Fragmentation and Connectivity (LFC) tool determined 98.98ha of impact, however no SRI on connectivity areas.</p> <p>Supporting information is required to justify how connectivity has not been determined an SRI for PL194.</p>	Section 8.3 has been updated to confirm the background to how the connectivity analysis has changed since this EA was deamalgamated.
16		<p>Table 1 ESA Potential Impacts and Key Management Practices Key management practices in Table 10 for direct disturbance of an ESA of protection zone has that:</p> <ul style="list-style-type: none"> • Prior to undertaking activities that result in significant disturbance to land, an ecological survey to confirm on ground biodiversity values will be undertaken by a suitably qualified person. <p>Ground truthing surveys of ESAs are required for all remnant vegetation and essential habitat regardless of the level of disturbance.</p>	Noted
17		<p>Species list</p> <p>The following endangered and vulnerable species identified in a WildNet species search have not been considered:</p> <ul style="list-style-type: none"> • White-throated Needletail 	Additional detail has been provided in section 8.1

		<ul style="list-style-type: none"> • Major Mitchell Cockatoo <p>These species need to be included in the ecological assessment and addressed in the SRI to PEMs report in accordance with Condition Biodiversity 14 of the EA or justification provided on why they have been excluded.</p>	
18	Section 7 Amendment options	<p>Checked: Locations – removal/addition of activity location Section 7 and Section 10 answers contradict each other.</p>	Forms updated
19	Section 10 Amend location(s)	<p>Checked: No - for Amend locations Section 7 and Section 10 answers contradict each other.</p>	Forms updated
20	Section 17 Regional interest areas	<p>Checked: Yes - for Regional interest area Please check and clarify this answer.</p>	Forms updated
21	Section 20 Environmental impact statement (EIS)	<p>Checked: No - for Has the EIS assessment report lapsed under section 59A of the EP Act. Please clarify how this answer meets the requirements under section 59A of the EP Act.</p>	Forms updated
22	GHG Assessment	<p>The application should include an assessment of greenhouse gas emissions associated with the proposed amendment. The department has released a draft Greenhouse Gas Emissions Guideline. While this guideline is in 'draft', this guideline does not have to be satisfied, however it can be used to identify what information can be provided.</p>	No additional impact requested on GHG. The overall number of wells is less than already approved on the EA.