AUSTRALIAN RESOURCE DEVELOPMENT GROUP PTY LTD

Kendall Clydsdale Principal Case Manager Office of the Independent Planning Commission NSW Suite 15.02 Level 15 135 King Street Sydney NSW 2000

Copy via email:	

17 October 2025

Dear Kendall,

Liverpool Range Quarry Project (SSD-68063715) – Questions Taken on Notice

We refer to the Stakeholder Meeting of 14 October 2025 and the questions taken on notice, outlined in the IPC's correspondence date 17 October 2025. A response is provided below.

Response

As referred to in the Stakeholder Meeting, a minor error was noted related to Paragraph 93 of the Department of Planning, Housing and Infrastructure (DPHI) Assessment Report (extract below):

93. The Department notes that the BDAR and additional information provided, states that the surveys undertaken in accordance with the BAM only found a total of 11 of the 115 species across three plots which are listed as making up this community. One plot contained no species.

Contrary to the DPHI comment that "one plot contained no species", as set out in the BDAR (Umwelt, 2024) and Addendum BDAR Report (Umwelt, 2025), there are four (4) plots within Vegetation Zone 2 (VZ2) and all four (4) plots have at least three (3) characteristic species present, though no more than six (6), out of 115 characteristic species in the listing. This is shown in Table 4.2 in the Addendum BDAR Report (extract below), which contains a summary of the native species (characteristic and non-characteristic) present in plots.

Table 4.2 Summary of Species Assemblage and Floristic Supplementary Descriptors

Descriptor	Metric	Plot 1	Plot 5	Plot 6	Plot 7	Vegetation Zone Average	Total Species Richness Across VZ 2
Species Assemblage							
Number of CEEC characteristic species present in BAM – Vegetation integrity Plots	Species Richness	3	4	3	6	4	11
Proportion of CEEC characteristic species present in BAM – Vegetation integrity Plots	% present	12.5	14.3	15.8	26.1	17.2	-
Proportion BAM – Vegetation Integrity Plots (%) associated with characteristic species	% Foliage Cover	0.9	15.6	15.7	36.6	17.2	-
Number of native species that are not listed as characteristic of the CEEC present in BAM – Vegetation integrity Plots	Species Richness	5	5	7	7	6	15
Proportion of native species not listed as characteristic of the CEEC present in BAM – Vegetation integrity Plots	% present	20.8	17.9	36.8	30.4	26.4	-
Proportion BAM – Vegetation Integrity Plots (%) non- characteristic	% Foliage Cover	40.9	10.9	34.1	12.9	24.7	-
Supplementary Descriptors							
Proportion of BAM Vegetation Integrity Plots supporting characteristic canopy species (%)	Species Richness	0	0	0	0	0	-
Proportion of BAM Vegetation Integrity Plots supporting characteristic species with high fidelity to the CEEC	Species Richness	0	0	0	0	0	-

Source: Liverpool Range Quarry Addendum Report to Biodiversity Development Assessment Report. Report prepared by Umwelt (June 2025)

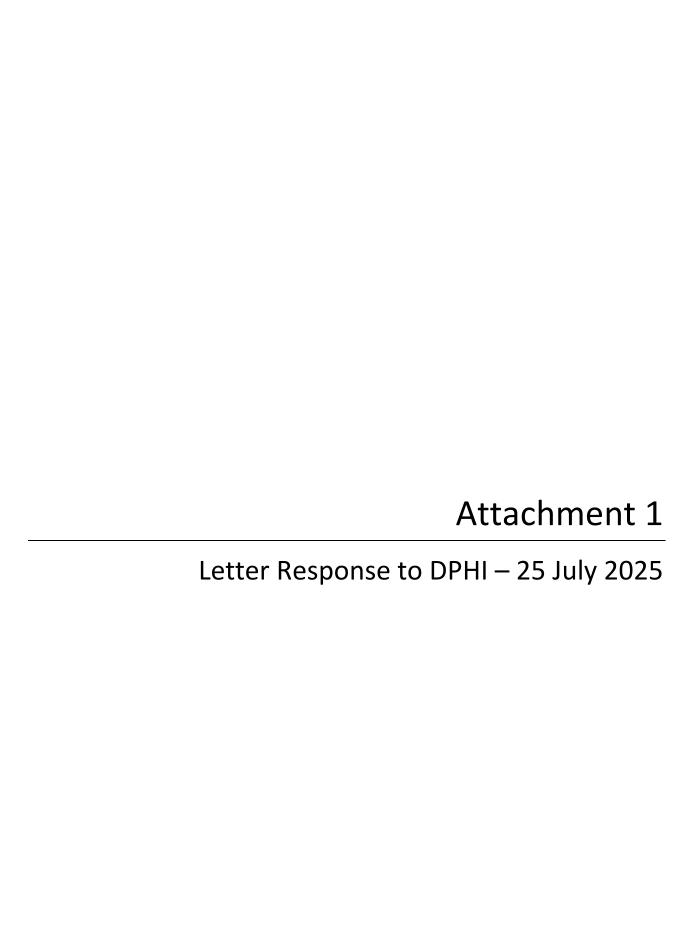
In summary, we do not consider that the minor error in the DPHI Assessment Report is material to the overall conclusions of the assessment of biodiversity impacts and SAII considerations in its Assessment Report. We also note that the overall conclusions are consistent with those detailed in the Umwelt letter response (dated 25 July 2025) to DPHI regarding Conservation Programs, Heritage & Regulation Group (CPHR) comments on this issue (refer **Attachment 1**).

Should you have any questions regarding the matters raised above, please do not hesitate to contact the undersigned.

Yours sincerely,



Dr Justin Meleo
Director – Planning and Development





25 July 2025

Carl Dumpleton Resources and Energy Assessments Department of Planning, Housing and Infrastructure

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Dear Carl

RE: Liverpool Range Quarry SSD-68063715 - Request for further information

We refer to the Conservation Programs, Heritage & Regulation Group (CPHR) of the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) letter dated 18 July 2025 providing further advice and recommendations in relation to the Liverpool Range Quarry Project (the Quarry Project). This letter provides a response to each comment and recommendation.

1. The BDAR (August 2024) does not accord with BAM. CPHR acknowledges that the addendum has been prepared by an accredited assessor. However, as previously highlighted, the addendum report contains important information, which is recommended to be incorporated into a revised BDAR.

Recommended the BDAR be revised to:

- include all relevant new information presented in the addendum report
- address all recommended actions for key issues below
- be re-certified by the accredited assessor on completion.

As advised in the 12 June 2025 Response, the original certified BDAR, together with the certified Addendum Report comprise a modified BDAR consistent with the requirements of 6.14 of the Biodiversity Conservation Act 2016 (BC Act).

Section 6.14 of the BC Act states that a biodiversity assessment report may be modified by the accredited person who prepared the report, at the request of the person who commissioned the report, or in the case of a biodiversity development assessment report—at the request of the person or body to whom the report was submitted in connection with the proposed development, activity or clearing. The Act and the BAM does not specify how the BDAR is required to be modified and does not require a modified BDAR to be contained to a single consolidated report. In the present case, the Addendum Report provides supplementary material to the assessment and updates the credit liability requirements following the completion of the lizard surveys foreshadowed in the original BDAR.



Provision of addendum reports is standard practice through the SSD assessment process. Examples of approved SSD projects that have responded to requests from CPHR in relation to either updated or additional information through either an addendum report and/or response letter include:

- Stone Ridge Quarry SSD-10432, approved by IPC in 2024
- Bowmans Creek Wind Farm SSD-10315, approved by IPC 2024
- Thunderbolt Wind Farm SSD-10807896, approved by IPC 2024
- Spicers Creek Wind Farm, SSD-41134610 approved by IPC 2024.

As the conclusions in the BDAR and addendum BDAR (together comprising the total BDAR for the purposes of 7.14 of the BC Act) remain unaltered based on the proposed response, no additional update to the BDAR is considered to be required as there is no further update to the BAM-C required in response to issues raised by CPHR in its most recent correspondence (see comments below). The recommendation to consolidate the findings in the two reports into a single document is purely administrative and would provide no additional benefit to the IPC (as the determining authority) in terms of assessment findings.

2. Vegetation Zone 2 has been determined as not representative of the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC.

CPHR previously recommended the BDAR be revised to associate VZ2 with the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC. Alternatively, the proponent needs to provide adequate justification to why it is not representative of the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC.

The current response to this recommendation, in Section 4.3.2 of the addendum report, is not deemed adequate.

The statement that the CEEC Final Determination (TSSC 2020) requires a substantial proportion of characteristic species to be observed to accurately determine the presence of the CEEC, and the presence of 11 characteristic species is not enough, is not deemed adequate. This statement does not accord with the information provided in the Threatened Species Scientific Committee (TSSC)

Final Determination for the CEEC, which states:

"characteristic species may be abundant or rare and comprise only a subset of the complete list of species recorded in known examples of the community".

The statement that there is a complete absence of CEEC listed characteristic canopy (mature or regenerating) and midstory species recorded in VZ2 during survey is also deemed inadequate justification. This statement does not accord with the information provided in the Threatened Species Scientific Committee (TSSC) Final Determination for the CEEC, which states:

"the canopy may be completely absent in areas of derived native grassland where tree removal has occurred"

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Given VZ2 is in the Brigalow Belt South bioregion, is likely to have recently contained white box, yellow box, or Blakely's red gum, has a ground layer that is mostly grassy, contains at least 11 of the characteristic species of the community, and has been mapped as an associated PCT, CPHR maintains the recommendation that the VZ2 is representative of the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC. This increases the total area of the CEEC proposed to be impacted to 19 ha.

Recommended action:

Unless adequate justification is provided, it the recommended that the BDAR be revised to associate VZ2 with the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC

This issue is a difference in professional opinion. With respect to the view expressed by CPHR, it is acknowledged that there are clearly circumstances where a Box Gum Woodland DNG can and does meet the listing criteria. However, the nature of the characteristic species present in this instance are not considered to be sufficiently representative of the CEEC assessed by the NSW Threatened Species Scientific Committee as being at risk of extinction. Rather, the DNG present in VZ2 is an example of a degraded grassland community resulting from the threatening processes that has led to the listing of this community as being threatened. In this regard, the following from paragraph 3.1.4 of the 2020 Final Determination is noted:

The condition of remnants [of the CEEC] ranges from relatively good to highly degraded, such as paddock remnants with weedy understories and only a few hardy natives left. Some remnants of the community may consist of only an intact overstorey or an intact understorey but may still have high conservation value due to the flora and fauna they support. Other sites may be important faunal habitat, have significant occurrences of particular species, form part of corridors or have the potential for recovery. The conservation value of remnants may be independent of remnant size.

As noted in the Addendum Report, the nature of the characteristic species present in plots with VZ2, together with the general vegetation and ongoing management practices of this area mean that the remnant grassland community in VZ2 could not reasonably be considered to represent 'important faunal habitat' or have 'high conservation value' due to the flora or fauna present. This grassland community is not considered likely to recover to the woodland variant or a high value DNG variant without significant managerial input and land use changes, particularly given the long history (and highly likely continuation) of sheep/cattle grazing on the land. Accordingly, the conclusion reached in the BDAR that the DNG present with VZ2 does not meet the listing criteria remains a reasonable professional opinion of the Accredited Assessors who prepared the BDAR and is consistent with the CEEC listing process and Final Determination.

Noting the comments raised by CPHR on this point, assuming the VZ2 DNG did meet the CEEC listing criteria, this would increase the total area of CEEC to be assessed against SAII considerations, from 3.2 Ha (as assessed in the BDAR) to approximately 19 Ha. The assessment of SAII considerations for a project's potential impacts on Box-Gum Woodland CEEC is informed by the assessment of SAII impacts for the Central West Orana Renewable Energy Zone (CWO REZ) Transmission project contained in the CWO REZ Assessment Report (DPHI, 2024). The CWO REZ SAII assessment of Box-Gum Woodland impacts is particularly relevant to the Project as the CEEC under consideration for the CWO REZ includes areas of the CEEC in the immediate vicinity of the Project and includes consideration of cumulative impact considerations of renewable projects associated with the CWO REZ, including the Liverpool Range Wind Farm (and arguably the Project under consideration here). The CWO REZ Assessment Report relevantly provides at pages 29-31:



Box Gum Woodland

The Department notes that in 2006, the Threatened Species Scientific Committee estimated that the extent of Box Gum Woodland was 250,729 ha, and the Committee's more recent 2020 advice also refers to that figure. Based on that figure, the BDAR estimates that current extent would now be 234,694 ha when combined with estimated annual losses since then.

There is also a more recent Commonwealth Conservation Advice (AG DCCEEW, 2023), however it is not directly relevant and more conservative, as it is aimed at protecting higher condition remnants listed under the EPBC Act, and it excludes many areas that are included in the NSW listing under the BC Act.

The Department understands that many ecologists consider that the numbers derived from 2006 are out-of date and likely to substantially underestimate the actual extent of Box Gum Woodland, as listed in NSW. Using the recent State-wide Vegetation Type Map (SVTM) released in 2022, there have been numerous efforts to provide a more up-to-date and accurate estimate of the extent of Box Gum Woodland under the NSW listing. The revised BDAR for this project provides an estimated current extent of 1,657,493 ha (including derived) or 1,370,658 ha (excluding derived) based on the NSW SVTM data set for relevant PCTs. Energy Co's Accredited assessor states that this estimate more accurately reflects the extent of the community as currently listed under the BC Act than the 2006 figure which is based on only the better quality remnants representative of the Commonwealth's minimum condition requirements".

Similarly, Dr Col Driscoll recently provided relevant information in relation to the Moolarben Coal Project, which is based on the recent NSW SVTM and estimates that the Gum Woodland CEEC within the SVTM in woodland form there is approximately 1,788,703 ha of extant Box Gum Woodland CEEC within the SVTM in woodland form". Dr Driscoll also estimated that there is approximately 5,315,040 ha of derived native grassland form, which results in a total of 7,103,743 ha of Box Gum Woodland in NSW. The project would impact up to 720.83 ha of Box Gum Woodland, which includes 168.29 ha of degraded vegetation with a Vegetation Integrity score less than 15 that does not trigger a requirement for offsetting under the BAM. There is also potentially an additional area of up to 63.61 ha of Box Gum Woodland associated with the Category-2 Regulated Land discussed above. Therefore, a total impact area of 781.44 ha is a conservative, worst case scenario.

As Box Gum Woodland is listed on the basis of 'population size' and 'rate of decline', it is particularly relevant to consider the project's potential impacts on Box Gum Woodland against the total area remaining in NSW. While the Department considers the estimates of total area based on the recent SVTM are likely to be more appropriate for the NSW listing, it has also considered the updated 2006 figure for comparative purposes. Using Dr Driscoll's estimate, the BDAR estimate and the updated estimate from the 2006 Final Determination, the project would represent an impact of 0.01%, 0.05% and 0.33% of the total remaining area in NSW, respectively.

The Department considers that it would be very difficult to conclude that an impact in the 0.04%-0.33% range is likely to contribute significantly to the extinction of Box Gum Woodland.

However, there are a large number of upcoming projects in the CWO region, including multiple wind farms, solar farms and coal mining projects, and the Department is looking

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carefully at potential cumulative impacts on biodiversity, particularly in relation to Box Gum Woodland. Based on the next 10–12 projects at various stages of the planning process in the CWO region (including this project), the Department conservatively estimates that there could be a total area of impact of up to 2,000 ha of Box Gum Woodland. Using the recent estimates, this would represent between 0.03% and 0.15% of the total area of Box Gum Woodland, or between 0.85% using the estimates based on the updated 2006 figure.

The Department considers that it would be reasonable to conclude that a cumulative impact of less than 1% using the most conservative assumptions is still unlikely to contribute significantly to extinction of Box Gum Woodland, and therefore unlikely to be SAII. However, the Department acknowledges that a precautionary approach may be appropriate and has been advising proponents to seek a 'nature positive outcome' that may help to further protect the Box Gum Woodland community.

Even if the area of DNG present in VZ2 did meet the CEEC listing criteria, the % of extant CEEC removed by the Project (assuming full removal) can be calculated, as is set out in the table below, using the same extant area estimates as considered in the CWO REZ Assessment Report.

Estimate	Area (Ha)					
	Woodland	DNG	Total (Ha)			
2006 Final Determination (revised to account for assumed loss)	234,694	0	234694			
CWO BDAR	1370658	286835	1657493			
Driscoll – (Moolarben)	1788703	5315040	7103743			
Project	3.2 (low condition)	15.8	19			
	Project Relevant % Reduction					
2006 Final Determination (revised to account for assumed loss)	0.00136		0.00136			
CWO BDAR	0.00023	0.00112	0.00019			
Driscoll - Moolarben)	0.00018	0.00006	0.00005			

The predicted impacts of the Project are more than an order of magnitude lower than those of the CWO REZ and, even based on the more conservative estimate of extant CEEC in the 2006 Final Determination, the Project would remove approximately 0.0014% of the extant CEEC even with the inclusion of the VZ2 DNG. Consistent with the conclusion reached in the CWO REZ Assessment Report, the above % calcs indicate the Project will not result in the extinction of the community nor have any reasonable impact on the likelihood of this occurring.

It must also be recognised however that the quality of vegetation needs to be considered in the assessment against SAII principles. Given the current DNG contains only a very poor representation of characteristic Box-Gum Woodland CEEC species with none of the 4 plots containing more than 6 of the 115 characteristic species (and 3 of the 4 plots containing 4 or less characteristic species) and no 'high fidelity' species in any plots, the relative dependence of the CEEC on the VZ2 for its survival is negligible (at best) to nil, particularly given:

 the native species present in this VZ are common to a wide range of communities including communities not comprising the CEEC and



 the continuing grazing (and associated pasture improvement practices) on this land in the absence of the Project would likely significantly degrade native species diversity in this grassland further.

In the absence of the Project, this vegetation community would not realistically be expected to recover to a woodland variant of the Box Gum Woodland CEEC under current and ongoing management practices. The removal of DNG VZ2 is therefore considered to have no significance in terms of (adverse) threats to the extinction of the Box Gum Woodland CEEC and it is arguable that the requirement to offset impacts to this VZ in accordance with BOS requirements will provide an overall positive outcome for the community.

Based on the above, the relevant considerations of the Project's impacts on the Box Gum Woodland in terms of SAII are therefore practically limited to the project's impacts on the 3.2 Ha of PCT483 present in the woodland variant. The assessment of the Project's impacts on this 3.2 Ha of CEEC is contained in Section 8.3 of the BDAR and Section 5.0 of the Addendum BDAR. As noted above, the relative % of the extant CEEC impacted by the Project is not considered to represent a SAII based on a consistent approach to SAII considerations as used for the CWO REZ assessment – particularly when the additional avoidance measures detailed in the 12 June 2025 Umwelt Response to Biodiversity issues is taken into consideration (see point 5 below).

3. Species Polygon for Barking Owl be revised to include all habitat as per guidance notes Species polygon guidance notes for Barking Owl states

The species polygon must be drawn to include all vegetation zones; 1. within 800 m from the location of a detected owl, and 2. containing a living or dead tree with a hollow >20cm diameter that occurs >4m above the ground. The location of the detected owl should be determined by estimating the distance and direction of the call.

CPHR recommend the Barking owl species polygon be revised to include all vegetation zones within 800 m from the location of a detected owl i.e. the entire development footprint within 800m of this species detection needs to be included within the species habitat polygon.

Recommended action:

The BDAR be revised to consider all vegetation zones within 800 m of this species detection as included within the species habitat polygon area for Barking owl.

The species polygon as drawn is entirely consistent with the species polygon guidance notes and has not been amended.

The Guidance notes state that the species polygon must be drawn to include all vegetation zones;

- within 800 m from the location of a detected owl, and
- containing a living or dead tree with a hollow >20cm diameter that occurs >4m above the ground.

The location of the detected owl should be determined by estimating the distance and direction of the call.

Importantly, the vegetation included in the polygon must meet **both** criteria specified in the guidance note. The CPHR assertion that the polygon is to include 'all vegetation' within the development footprint is incorrect in the case of the Project, as only VZ1 contains trees with hollows >20cm in diameter and >4m above the ground, as identified in Table 5.3 of the BDAR. The polygon used to calculate species credit requirements for the Barking Owl is shown correctly in Figure 5.1 of the BDAR and no further update to either the BDAR or offset calculations is required.



4. Commitment to avoid and minimise impacts to White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEE

CPHR maintain the recommendation that further consideration of opportunities to avoid and minimise impacts to the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC. This is particularly important given the discussion in the addendum report are based on only impacting 3.2 ha of the community, when in CPHR's view the Project will impact up to 19 ha of the community.

Specifically, it is recommended that opportunities to avoid and minimise impacts are considered for the areas proposed for secondary processing and stockpiling facilities, impacts both EPBC Act and BC Act listed TEC.

Recommended action:

The proposal be revised to further avoid and minimise impacts on biodiversity values, specifically the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC mapped as PCT 483 - Grey Box x White Box grassy open woodland on basalt hills in the Merriwa region, upper Hunter Valley Low condition (Vegetation Zone 1) and the BDAR updated accordingly.

While the Project is proposing to offset the entire VZ1 and VZ2 areas on the assumption of complete disturbance of both areas, the Project is committing to retain trees within VZ1. The proposed offsetting therefore represents a conservative and nature-positive outcome relative to complete removal of all vegetation within the VZ as assumed for offsetting calculations. The commitments outlined in the 12 June 2025 letter will result in at least 19 of the 46 trees present within the 3.2 Ha VZ1 being retained. This retention of at least 41% of the trees within VZ1 is broadly consistent with the additional offsetting obligations accepted as being appropriate additional measures in the case of the CWO REZ Project (noting that potentially more than the 19 trees may be able to be retained through the detailed design process).

5. The Minister for Planning needs to determine if a serious and irreversible impact (SAII) to the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC.

The White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC meets SAII principle 1 – a species or ecological community currently in a rapid rate of decline, and principle 2 – a species or ecological community that currently has a very small population size.

The CEEC has undergone a very large reduction in geographic distribution since European colonisation and there is evidence that clearing has increased in recent years. High rates of clearing are likely to continue under the current regulatory framework. Agricultural practices have resulted in very high levels of environmental degradation of this CEEC, leading to disruption of its biotic processes and an increased risk of failure to sustain its characteristic native species assemblages.

When considering whether a SAII is likely, the Minister for Planning should note that the proposal will impact 19 ha of the CEEC and so exacerbate SAII principles 1 and 2 by contributing to the already rapid decline of the community and further reducing its already very small population size.



The consent authority should also consider the cumulative impact of the proposal in conjunction with the Liverpool Range wind farm project which proposes the loss of 428.3 ha of the CEEC.

The impact would be serious and irreversible if it is likely to contribute significantly (real chance) to the risk of the CEEC becoming extinct, based on the regulation principles. If the Minister for Planning concludes that a SAII will occur, then under s 7.16(3)(b) of the BC Act, the Minister is required to determine whether there are any additional and appropriate measures to minimise those impacts if approval is to be granted. This must occur before the application is determined and cannot be deferred to a post approval management plan.

Recommended action:

The consent authority should determine if the project will have a serious and irreversible impact on White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC, consider these impacts and any reasonable additional and appropriate measures to mitigate the impact in deciding whether to approve the project.

If the Minister for Planning is of the opinion that a SAII will occur, then CPHR should be consulted to assist in identifying additional and appropriate measures to minimise impacts on White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC.

This comment is noted. The response to issue 2 raised by CPHR supplements the assessment of SAII issues contained in Section 8.3 of the BDAR and Section 5.0 of the Addendum BDAR by including an assessment of the Project's impacts under a conservative interpretation of VZ2 meeting the CEEC listing criteria. The Project's impacts would not contribute significantly to the risk of extinction of the Box-Gum Woodland CEEC and would not constitute SAII.

Should you have any questions regarding the matters raised above, please do not hesitate to contact the undersigned.

Yours sincerely

David Holmes

Principal Environmental Consultant

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