

Site Specific EA Application Responding to Information Request

**Blue Energy – Sapphire (PL1034), Central (PL1038) and
Lancewood (PL1045)**

Revision Status

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Introduction

In response to an information request (C-EA-100196728) related to Environmental Authority application (A-NEW-100196712) dated 11 March 2022 by the Department of Environment and Science Blue Energy has prepared the following responses to address all information requested. The EA application dated the 31 January 2022 has been updated accordingly to address the information requested and reference to the updated sections of the application is included in this document.

Consistent with the information notice, the response is set out to correspond to each section in the information request.

A summary of the project changes that have occurred subsequent to DES' information request is provided in Section 1.2 of the EA Application document.

A. Produced Water Management

Information Request:

Please provide a description of the proposed water management system and the infrastructure required to implement the system both within and outside of the project area. Further information is required to provide the potential receivers of the CSG water and their locations in respect to each of the Petroleum Leases (PLs), details of the stage that discussions with these third parties are currently at and any infrastructure associated with the management of produced water management off site. This description should also include the proposed steps to be undertaken to gain the approvals and permissions needed for the infrastructure beyond the project area.

Grounds

The project description does not provide sufficient and clear information about the required produced water management strategy and relevant associated infrastructure; in particular, whether any produced water storages and treatment facilities will be required within the project area. Section 6.5.3.1 of the supporting information states that "*CSG water will be contained on site and transferred to a treatment facility*" and Section 9.3.1 states "*All raw CSG water will be stored in above ground tanks to prevent seepage (no dams will be utilised) and initially piped to a nominated centralised location on each PL for treatment and further storage in above ground tanks*". This level of information is not adequate for the proper assessment of the potential risks and does not provide the required level of the description of the activity as required by section 125 of the *Environmental Protection Act 1994*.

Response:

A new section 'CSG Water Management' (refer to Section 2.8) has been included in the EA application document to provide further information on the proposed produced water management strategy and relevant associated infrastructure. Other relevant sections of the EA application document have been expanded to further describe CSG water management:

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- Section 2.3.1 Project Development
- Section 2.5.3 Gathering Systems
- Section 9.2 Waste

B. Gas Management Infrastructure

Information Request:

Please provide a description of the proposed gas management infrastructure required to be implemented both within and outside of the project area. This description should also include the proposed steps to be undertaken to gain the approvals and permissions needed for the infrastructure beyond the project area. Further information is required to provide the potential receivers of the gas in respect to each of the PLs, details of the stage that discussions with these third parties are currently at and any infrastructure associated with the project off site that may be required to manage the gas and deliver this gas to the proposed receivers. This description should also include the proposed steps to be undertaken to gain the approvals and permissions needed for the infrastructure beyond the project area.

Grounds

The project description does not provide sufficient information about the proposed gas management infrastructure and strategy. The application states that Blue Energy will be seeking agreements to utilise third party owned compression and pipeline facilities and that gas facilities are outside of the scope of this EA application. This level of information is not adequate for the proper assessment of the potential risks and does not provide the required level of the description of the activity as required by section 125 of the *Environmental Protection Act 1994*.

Response:

Sections of the EA application document have been updated and expanded to provide further information on gas management infrastructure as follows:

- Section 2.2.1 Overview of Proposed Petroleum Activities
- Section 2.3.1 Project Development
- Section 2.5.3 Gathering Systems
- Section 2.5.4 Compression Station

C. Associated Infrastructure

Information Request:

Please provide a description and scale of all associated infrastructure required to implement the proposed project. This associated infrastructure may include water tanks, access tracks, water treatment facilities, borrow pits, laydown areas, workshops, administration buildings, control rooms, camps, etc.

Grounds

The application information provides information about the wells and pipelines required for the project. The application also states that there will be no compression facilities, sewage treatment

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plants or dams within the project area. However, the application does not describe any other associated infrastructure that may be required and its proposed scale, intensity, and location.

Response:

A new section ‘Other Incidental Petroleum Activities’ (refer to Section 2.9) has been included in the EA application document to provide further information on associated infrastructure.

Section 2.5 ‘Infrastructure’ has also been updated and expanded to provide further information on associated infrastructure.

D. Soil Type

Information Request:

Please confirm the soil types present within the project area and amend the proposed impacts and mitigation measures accordingly if required.

Grounds

Section 3.2.3 of the application states that the soils likely to be encountered within the Project area will be Vertosols, Kandosols, Sodosols and Rudosols. However, Figure 14 of the application indicates that the soils over the Project area are Vertosols, Kandosols, Sodosols, and Dermosols.

Response:

Section 3.2.3 of the EA application document has been updated to confirm the soil types present and provide information on proposed impacts and mitigation measures.

E. Field Assessments

Information Request:

Please provide the targeted field ecological assessments which verify the results of the desktop assessment.

Grounds

- Sections 5.2.4 and 5.2.5 of the application information indicate that field surveys of threatened flora and fauna have been undertaken on an opportunistic basis only. In regard to both threatened flora and fauna, these sections state “*Targeted field surveys are required to determine the presence/absence of species determined to have a moderate to high likelihood of occurring within the PLs and to comprehensively map the extent of suitable habitat, thereby informing strategies to avoid, minimise and manage potential impacts to these species*”. Sections 5.4.3 and 5.4.4 of the application information also state that based on desktop searches, 13 conservation-significant flora species and 22 threatened fauna species were recorded within 20km of the PLs or potentially relevant to the PLs.

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- Section 5.2.7 of the application information states that extensive ground-truthing of Regional Ecosystems (REs) within each proposed PL was not undertaken. This section states that *“Large proportions of each PL were inaccessible during ground-truthing activities. Therefore, ground-truthed REs presented in this report do not represent a comprehensive overview of the distribution and occurrence of all REs within each PL”*.
- Section 5.4.1.4 of application information indicates that ground-truthing of Essential Habitat within each proposed PLs was not undertaken. This section states *“An assessment of ground-truthed essential habitat values for threatened fauna was not undertaken as part of the field assessment. Therefore, all areas of essential habitat are based on those presented within State mapping”*.
- Section 5.4.2.1 of application information indicates that the assessment of Threatened Ecological Communities (TECs) under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) is based upon the limited ground truthing activities and State mapping. This section also states that additional field assessment is required to establish whether key diagnostic characteristics and condition thresholds have been met to establish the presence of TECs.

Targeted field assessment is required to verify the results of the desktop assessment. As these are prescribed environmental matters under Schedule 2 of the Environmental Offsets Regulation 2014, it is essential that the presence/absence and the density of these matters, if present, within the project area are known. This will provide needed certainty in order to adequately assess the potential impacts of the project activities on these prescribed environmental matters.

Response:

Additional assessment, both desktop and targeted field ecology surveys (ground truthing), has been undertaken and has resulted in a significant reduction in the project scale and intensity. Targeted field surveys were undertaken on Sapphire (PL1034) as the first tenement to be developed and further surveys are proposed for Central and Lancewood at future stages. Sections of the EA application has been updated and expanded to provide a detailed overview of the targeted survey work completed as follows:

- Section 5.2 Ecology Existing Environment
- Section 5.4 Potential Impacts and Management Measures

F. Connectivity Areas

Information Request:

Please provide an assessment of the project impacts on the connectivity areas. As a prescribed environmental matter under Schedule 2 of the *Environmental Offsets Regulation 2014*, it is essential that the scale of fragmentation due to the project is assessed and verified. This will provide the needed certainty in order to adequately assess the potential of the project to have a significant residual impact in accordance with the Queensland Environmental Offsets Policy Significant Residual Impact Guideline, in regard to connectivity.

Grounds

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Section 5.4.1.2 of the application information indicates that *“Significant impacts to connectivity values, in accordance with the Landscape Fragmentation and Connectivity (LFC) tool were not assessed as part of this report. Assessments of significant impacts to connectivity within each PL should be undertaken in conjunction with resolved areas of proposed disturbance to determine impacts at a local and regional scale”*. This section also indicates that the proposed project area is likely to provide important connectivity values.

Response:

A new section ‘Habitat Fragmentation’ (refer to Section 5.5.3) has been included in the EA application document to provide further information the proposed measures related to the management of habitat fragmentation during field planning and vegetation clearing activities. Blue Energy has committed to carrying out an assessment of connectivity in accordance with the Landscape Fragmentation and Connectivity (LFC) tool prior to site disturbance.

G. Offset Requirements

Information Request:

Please provide a significant residual risk assessment in accordance with the Queensland Environmental Offsets Policy Significant Residual Impact Guideline. This must be undertaken based on the likely prescribed matters present within the project area.

Grounds

As stated in the items identified above, without a clear identification of the prescribed matters present within the project area and the likely extent of the impacts on these matters, an assessment of the significant residual risk associated with the project cannot be concluded. The application states that the project will not result in a significant residual impact to prescribed environmental matters. However, this statement cannot be verified given that the ground-truthing of these matters has not been undertaken.

Response:

Blue Energy is proposing to avoid significant residual impacts to MSES through the implementation of their Environmental Protocol for Field Development and Constraints Analysis. This document outlines Blue Energy’s methodology for assessing environmental constraints during the planning and field development process. This includes the requirement for field verification of environmental values prior to ground disturbance in accordance with conditions Biodiversity 1 to Biodiversity 3 of the Streamlined Model Conditions for Petroleum Activities. Proposed infrastructure locations will then be refined to minimise and avoid impacts to MSES where possible, or additional approvals and offsets will be sought where required. Currently, environmental offsets will not be required to mitigate significant residual impacts to prescribed environmental matters.

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