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27 June 2022

Chair – Independent Planning Commission Professor Alice Clark C/- Brad James, Principal Case Manager Suite 15.02 Level 15 135 King Street Sydney NSW 2001

Dear Professor Clark,

RE: MOUNT PLEASANT OPTIMISATION PROJECT – RESPONSE TO APPLICANT BRIEFING QUESTIONS

Thank you for the opportunity to brief the NSW Independent Planning Commission (IPC) in regard to the Mount Pleasant Optimisation Project (the Project) on 16 June 2022.

Please find enclosed MACH Energy Australia Pty Ltd's (MACH's) responses to the IPC's letter dated 20 June 2022 which requested further information regarding the following questions:

- 1. the target coal seams and associated gas contents;
- 2. the long-term stability of the final void; and
- 3. potential impacts on the Aboriginal cultural heritage site MTP-457.

Responses to questions 2 and 3 are provided below. MACH is currently preparing a response to question 1, and this response will be provided under a separate cover once available.

In the letter dated 16 June 2022, the IPC stated:

Final Void:

2) Can the Applicant provide further information on the long term stability of the post-mining landform, specifically the final void highwall/batter slopes?

MACH gave consideration to the potential long-term stability of the final highwall slopes in the design of the Project final landform.

Attachment 8 of the Environmental Impact Statement (EIS) presents a Rehabilitation and Mine Closure Addendum for the Project that describes the key post-mining landform design features.

As described in Attachment 8, MACH has designed the final Project landform to:

- backfill approximately 1.5 kilometres (km) of the northern part of the final void;
- reduce the depth of the final void in the North and Central Pit areas and decrease the slope of the internal batters;



- apply geomorphic design concepts to parts of the Project landform that drain to the final void;
 and
- push down the western highwall to an overall angle of approximately 18°.

As a result of the above, the Project final void is considered safe, geotechnically stable and minimises the catchment reporting to the void whilst still maintaining geomorphic design concepts.

Attachment 13 of the EIS (Geotechnical Considerations) also presents additional geotechnical advice on the Project final landform provided by GeoTek Solutions (2020).

GeoTek Solutions (Attachment 13 of the EIS) concluded that the Project is located in a geotechnically benign mining environment:

The gentle strata dip, shallow overburden depth, strength of the fresh overburden, the moderately strong Edderton Seam floor and the absence of severe faulting effects combine to form a geotechnically benign mining environment.

With respect to the final landform highwall design, GeoTek Solutions (Attachment 13 of the EIS) also stated:

On the highwall side, stable mining slopes will have been flattened to a slope comprised of segments at various angles but with an overall angle of about 18°. The lower part of the highwall will consist of fresh overburden rock configured as a buttress. The minimum factor of safety (FoS) for the highwall side of the void is about 1.5 for a shallow circular surface that passes only through the rock buttress and not any intact rock. From this it is concluded that the fresh broken rock buttress and the slopes that it notionally supports are in a geotechnically, acceptable configuration.

MACH would continue to design and construct the open cut and final landform features to suitable geotechnical factors of safety over the life of the Project.

In the letter dated 16 June 2022, the IPC stated:

Aboriginal Cultural Heritage:

3) Can the Applicant provide clarification on how potential impacts to the 'Spiritual Place' (AHIMS ID# MTP-457) will be "offset by other measures" (slide 35)?

As described in the Aboriginal Cultural Heritage Assessment (ACHA), the potential impacts of the proposed State Significant Development (SSD) Mount Pleasant Optimisation Project were categorised with respect to the existing approved impacts of the Mount Pleasant Operation on Aboriginal heritage, and included the following categories (ACHA - Section 1.1) (emphasis added):

For the purposes of this Aboriginal Cultural Heritage Assessment, the SSD Area can be subdivided into a number of Zones:

- A) Existing Approved Areas where the SSD disturbance would not comprise additional primary disturbance. These areas can be subdivided further as follows:
 - A1) Subject to previous heritage survey and covered by an AHIP.
 - A2) Subject to previous heritage survey, but not covered by an AHIP.
 - A3) Not subject to previous heritage survey, but covered by an AHIP.
 - A4) Not subject to previous heritage survey and not covered by an AHIP.



- A1R) Subject to previous heritage survey and covered by an AHIP but disturbance area to be relinquished under the SSD.
- A2R) Subject to previous heritage survey, but not covered by an AHIP but disturbance area to be relinquished under the SSD.
- A3R) Not subject to previous heritage survey, but covered by an AHIP but disturbance area to be relinquished under the SSD.
- A4R) Not subject to previous heritage survey and not covered by an AHIP but disturbance area to be relinquished under the SSD.
- B) Areas in which additional SSD primary disturbance is proposed. These areas can be subdivided further as follows (refer to Figure 6):
 - B1) Subject to previous heritage survey and covered by an AHIP.
 - B2) Subject to previous heritage survey, but not covered by an AHIP.
 - B3) Not subject to previous heritage survey, but not covered by an AHIP.
 - B4) Not subject to previous heritage survey and not covered by an AHIP.
- C) Remainder of the SSD Area in which potential minor future disturbance may occur subject to the detailed infrastructure engineering design⁷.

The ACHA described site MTP-457 as follows (Section 7.2):

One spiritual place is listed on the MPO Aboriginal Site Database, MTP-457, recorded by Roberts (2007) as a "steep slope overlooking flat possible taboo area (men's area)". No further information was presented by Roberts (2007) and the validity of this site remains uncertain. It is however, located within SSD Zone A1, with an approved AHIP in place for existing approved disturbance, and therefore further assessment is not warranted.

The ACHA quotation above highlights that this site falls into the following ACHA site category:

 ${\it A)} \quad \textit{Existing Approved Areas where the SSD disturbance would not comprise additional primary disturbance}.$

A1) Subject to previous heritage survey and covered by an AHIP.

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In addition, the ACHA states the following (Section 10.2.1):

The 'spiritual place' reported by Roberts (2007) is of uncertain validity, however its location within SSD Zone A1, with an approved AHIP in place for existing approved disturbance, means that the appropriate management strategy for this item is 'no further action required'. The significant heritage salvage measures and conservation areas have acted to counterbalance any impacts to this item.

MACH understands that the ACHA is articulating in the above quotation that the extensive physical heritage salvage measures and the Aboriginal heritage conservation areas associated with the approved Mount Pleasant Operation have acted to counterbalance any impacts to the cultural heritage values of this item (noting that the database recorded location for MTP-457 is close nearby, but outside of, the existing approved waste rock emplacement).



The existing Mount Pleasant Operation Conservation Area A, and the provisional Conservation Areas B and C and associated potential alternatives are described in Sections 9.1.5, 10 and 11 of the ACHA.

Appendix 7 of the ACHA further summarises that the Proposed SSD Project would not result in any change to potential impacts on MTP-457, relative to the impacts of the approved Mount Pleasant Operation.

The currently approved Mount Pleasant Operation Aboriginal Cultural Heritage Management Plan would be replaced by a new Aboriginal Cultural Heritage Management Plan prepared for the Project.

In accordance with the recommended Development Consent Conditions, MACH would consult Heritage NSW and the Registered Aboriginal Parties during the preparation of the Aboriginal Cultural Heritage Management Plan for the Project.

If you require any further information on the matters discussed above, please contact the undersigned.

Yours sincerely,



Chris Lauritzen General Manager Resources Development MACH Energy Australia