

Date : 23/03/2022 11:38:57 AM

From : "Kathryn Eller"

To : "Luisa Taufatofua" Luisa.Taufatofua@des.qld.gov.au

Subject : Caval Ridge CAC progress

Attachment : EA Amendment 20220322 CAC Report EPML00562013 BHP Coal Pty Ltd Caval Ridge Mine.docx;image001.png;image002.png;

Hey Lu

Here is my comments on the Caval Ridge CAC so far.

Cheers,
Kathryn



Kathryn Eller

A/Team Leader

Business Centre Coal | Coal and Central Compliance

Department of Environment and Science

P 07 4987 9347

PO Box 731, Toowoomba QLD 4350

Published on DESI Disclosure Log
RTI Act 2009

Environmental Protection Act 1994

Coordinated assessment committee (CAC) report on the requirement for an environmental impact statement (EIS)

This internal report is for recommendations to the Department of Environment and Science CAC on whether an EIS is required for a project under sections 70, 73A, 143 and 228 of the Environmental Protection Act 1994 (EP Act).

When this report applies

The report format should be used for all resource applications meeting the requirements for a decision by CAC on whether an EIS is required under sections 70, 73C, 143 and 228 of the EP Act.

Specifically, this report should be used for:

- all site-specific resource applications for an environmental authority (EA) (s143 EP Act)
- applications that are major amendments to an EA (s228 EP Act)
- applications for voluntary preparation of an EIS (s70 EP Act)
- applications for: decisions on whether an EIS would be required for EA applications under s73A(1)(a) of the EP Act; and, if relevant, applications to prepare an EIS under s73A(1)(b) of the EP Act, if the chief executive decides an EIS would not be required for an EA application.

Note: this report is **not** for projects that have completed an EIS under the EP Act. It also does **not** apply to 'coordinated projects' under the *State Development and Public Works Organisation Act 1971*.

How to use this report format

This report should be prepared by the nominated assessment officer and should include a recommendation based on an assessment of:

- Part A (department interests)
- Part B (trigger criteria)
- Part C (standard criteria) of this CAC report.

Applications for major EA amendments should attach the assessment level decision (ALD decision) and supporting documentation, such as maps, to this CAC report. The CAC report must be approved and signed by the manager.

The completed CAC report should then be forwarded to Environmental Impact Assessment Team at eis@des.qld.gov.au, carbon copy (cc) to Pauline.Gregory@des.qld.gov.au and Chris.Loveday@des.qld.gov.au.

Applicant and project details

Project name	Caval Ridge Horse Pit Extension
Applicant name ¹	BHP Coal Pty Ltd
Project type	Mining black coal
Tenure details	ML70403; ML1775; ML70462
Project location	Caval Ridge Mine is located 7km south of Moranbah. The proposed Horse Pit Extension located towards the north west of the site.

Administrative details

Application type	Major amendment of a site-specific environmental authority.
Environmental authority no. (if relevant)	EPML00562013
eDOCS reference	101/0000190
Department business centre	Business Centre Coal
EIS decision due (max 3 bd after CAC report) ²	28 March 2022 (*20BD from payment of major fee)
Information request due (section 140 EP Act)	28 March 2022 (*20BD from payment of major fee)

¹ The 'applicant' is the persons, or registered legal entity (not a business trading name) intending to carry out the activity and in whose name the applicable permits or licences are to be issued.

² The EIS decision is due three business days (3 bd) after the CAC report is provided to CAC.

Recommendation³	
<p>After completing Parts A, B and C of this report, mark which of the following applies:</p> <p>(a) EIS is required.....☐</p> <p>(b) No EIS is required.....☒</p> <p>Statement of reasons:</p> <p>The assessing officer recommends that an EIS is not required for the major amendment regarding environmental authority EPML00562013. The major amendment application relates to the extension of the existing Horse Pit to the north east of Caval Ridge Mine, located on mining lease (ML) 1775, ML70403 and ML70462. The application, lodged 15 December 2021 by the principal applicant BHP Coal Pty Ltd, has been assessed against the 'EIS criteria for resource projects' (EIS criteria) as per section 3 of the Department's Guideline – 'Criteria for environmental impact statements for resource projects under the environmental Protection Act 1994' (ESR/2016/2167) (EIS Guideline).</p> <p>The assessing officer has considered the EIS criteria through reference to the application documents, the EIS guideline and the information contained within this report. As a result, the assessing officer has taken into account the following:</p> <ul style="list-style-type: none"> • the 'standard criteria' as per Schedule 4 of the <i>Environmental Protection Act 1994</i> (EP Act); • the trigger criteria as per the EIS triggers for proposals to amend/alter an existing mine; • the relative magnitude of the project with regards to its scale and risk of impacts to environmental values; • the public interest with regards to the amendment and its impacts; • any uncertainties with regards to possible impacts; • any significant issues to be addressed by other Queensland Government or Commonwealth Government authorities; • the social and economic impacts; and • any cumulative impacts. <p>Further, the assessing officer is satisfied that any issues concerning the above can and will be resolved, without the need for an EIS.</p>	
Assessing officer: Luisa Taufatofua	Date: 22/03/2022
Delegate (EP Act): Juliana McCosker	Date: Click here to enter a date.

³ In making this recommendation, the department's guideline *Criteria for environmental impact statements for resource projects under the Environmental Protection Act 1994* (ESR/2016/2167) assists the administering authority to carry out its functions and responsibilities in accordance with the EP Act. This includes empowerment of the right to require an EIS for a resource development project if consideration of the standard criteria (and any other relevant considerations) shows an EIS should be required, irrespective of the triggers in this guideline.

PART A – DES INTERESTS

Additional approval processes required (attach details where necessary):

- ☐ None
- ☐ Other applications received by the department for project
- ☐ A process under the *State Development and Public Works Organisation Act 1971*
- ☒ Commonwealth processes under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- ☐ Other

The applicant has also submitted an application for approval under the EPBC Act which is currently under review. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Special considerations (attach details where necessary):

- ☐ Affects an environmentally sensitive area (Category A, B and/or C⁴)
- ☐ Involves a large number of individual decisions
- ☒ Is likely to generate significant community concern
- ☐ Needs policy change for approval
- ☐ Applicant suitability⁵
- ☐ Involves significant issues with another Queensland Government/Australian Government authority
- ☐ Involves impacts on an existing legally secured offset area under State and/or Commonwealth legislation
- ☐ Another special circumstance which significantly elevates environmental, social or economic risks beyond those usual for this type of project
- ☐ Other

The amendment is likely to generate significant community concern due to three primary factors:

1. The proposed Horse Pit Extension will bring mining activities within closer proximity to multiple sensitive receptors, specifically it will be located right next to the Moranbah airport and in close proximity to the town of Moranbah and other surrounding homesteads to the north.
2. Furthermore, the potential for air quality impacts to sensitive receptors, particularly at the Moranbah Airport or town of Moranbah, is anticipated to increase significantly which could have issues to the health and wellbeing of sensitive receptors and the general public accessing these areas.
3. The amendment proposes for a final void of 680ha to remain following the closure of the mine. It is not clear whether this void will be able to sustain a post-mining land use or whether it will result in a non-use management area located in close proximity to the Moranbah airport, town of Moranbah and the adjoining highway.

On the other hand, the proposed project is anticipated to have numerous community benefits including the ongoing provision of jobs to those currently employed at Caval Ridge and localised benefits to the town of Moranbah.

⁴ Refer to guideline ESR/2016/1985: 'Eligibility criteria and standard conditions for exploration and mineral development projects'

⁵ Refer to guideline ESR/2015/1771: 'Application to be a registered suitable operator'.

Commented [KE1]: Yes?
Add in a line about the category B?

Pre-lodgement advice

Provide information on date, who and what advice was given during the pre-lodgement meeting.

20 October 2020: A Technical Workshop 1 was held between DES, BHP (applicant) and SLR (Consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focussed on air quality, noise, land and geochemistry.

- Air quality: No questions from DES.
- Noise and Vibration: DES queried how old the data proposed to be used for cumulative impact assessments was.
- Land: DES queried the depth of topsoil and stated that DES will be looking very closely at topsoil management going forward.
- Geochemistry: No questions from DES.

21 October 2020: A Technical Workshop 2 was held between DES, DAWE and BHP (applicant) and SLR (consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focused on terrestrial ecology, GDEs, Groundwater and Surface Water.

- Terrestrial Ecology: DES had queries around Horse Creek, herbarium mapping and that offsets may be required.
- Groundwater: DES had queries around mapping and details of proposed bores.
- GDEs: DES reiterated that it is not DES's role to comment on the methodology of the assessments but to assess the assessment. DES also expressed those reports, documents and technical information would need to be provided prior to DES providing any detailed feedback.
- Surface Water: DES queried any interactions between pit flows and surface water flows to Horse Creek which SLR consulting confirmed there would be no interactions.

19 August 2021: A pre-lodgement meeting was held between DES and BHP to discuss the Caval Ridge Horse Pit Extension Project. At this meeting a site visit was organised to be held on 28 August 2021.

28 August 2021: A site visit was undertaken to Caval Ridge.

Other issues

Provide information on any other issue not covered in this CAC report.

The application was submitted on 15 December 2021 and on 17 January 2022, it was determined that the amendment be a major amendment requiring public notification. The project was deemed to be likely to be a substantial increase in the risk of environmental harm and the risk is the result of a substantial change in the results of the release of a quantity or quality of a contaminant permitted to be released into the environment. This was triggered due to the significant increase in the air quality impacts predicted from the study particularly around dust and PM10 emissions. The air quality technical report provided with the application did not provide sufficient justification that the applicant would be able to reduce the air quality impacts to below the 10% trigger limit. On 18 January 2022 and 10 February 2022, the Department had a meeting with the applicants to discuss the issues regarding the air quality impacts. The applicant advised that they would be providing updated technical reports to demonstrate how Caval Ridge will be able to reduce the air quality impacts and comply with the conditions of the EA. Such was to be provided following withdrawal of the application and subsequent resubmission. The applicant decided to progress with the application including public notification instead.

DES interests

If an impact is indicated, provide information on the level and significance of the impact on the matter

Background

On 15 December 2021, the administering authority (the Department of Environment and Science [DES]) received an application for an amendment to EA EPML00562013 which is held by the Central Queensland Coal Associates Joint Venture (CQCA JV) with BM Alliance Coal Operations Pty Ltd (BMA) as both the manager and the agent on behalf of the CQCA JV. Caval Ridge Mine is located on mining lease (ML) 1775, ML70403 and ML70462 and is approximately 7km south of Moranbah in the Bowen Basin, Queensland.

Amendment Description

The applicant proposes to extend an existing northern mine pit, named Horse Pit. This will result in a revised life of mine from 2026 to 2056, adding 30 years to the operation to that of existing approvals. The Horse Pit Extension Project proposes an additional 910.71 ha of disturbance and will include:

- The extension of the Horse Pit (655.65 ha in the north east of ML 1775);
- The addition of an out of pit dump (107.31 ha) in the northwest of ML 70403;
- The relocation of existing infrastructure located within the proposed Horse Pit extension site including the EME Build Pad, blasting compound with two potential relocation options, back access roads, substations, go-lines and powerlines;
- The construction of two additional regulated flood levees to protect the proposed project area from potential flood events (up to 0.1% Annual Exceedance Probability (AEP)).
- The northern (Horse Pit North) levee will be approximately 1.4km in length and bounds a portion of Horse Pit in the north of the proposed pit; and
- The western (Horse Pit West) levee will be approximately 400m in length and located within the south west extent of the proposed out of pit dump.
- The construction of a bridge over Horse Creek and the extension of the haul road to the north west of ML 70403 to access the proposed out of pit dump
- The construction of sediment dams as well as both clean water and MAW diversion drains to manage runoff from the proposed OOPD;
- The relocation of the Peak Downs Highway dragline crossing; and
- A Post-closure rehabilitated final landform with a single final void of approximately 680ha in the far east of ML1775.

CVM Justification for the proposed amendment

The Project proposes to extend the footprint of the existing Horse Pit at the CVM. ~~As a result of exploiting efficiencies in mine sequencing and planning, mining activities are currently~~ scheduled to reach the limit of the approved Horse Pit extent during Financial Year (FY) 2025, with some existing site infrastructure potentially being relocated from 2023. If approved, the extension is projected to extend the mine's life from the 2030s to the 2050s, protecting jobs and royalties into the future.

Significant mine engineering design has been undertaken to accommodate for the Project, which will utilise existing CVM infrastructure for coal processing, tailings disposal and rail loadout of product coal, amongst other things. The Project facilitates an opportunity to further contribute to Australia's position as a primary global producer of high-quality coking coal products. The Project will extract otherwise under-utilised resources from an area already disturbed by previous land uses which provides benefits over establishing a mine at a greenfield site. The extension of the mine life at CVM will also see further economic benefits to local and regional communities. Activities associated with the Project are not expected to cause environmental harm to any nearby sensitive receptors such as

residential housing and/or local businesses. However, mitigation measures will be implemented to prevent or minimise negative impacts on surrounding environmental values.

Other Matters

The applicant has provided an EIS Trigger Assessment in the 'EA Amendment Supporting Information' (refer Table 2-2 and Table 2-3) in which they have stated that no EIS triggers are relevant to the Project. The applicant has also stated that they anticipate that the ERAs listed on the current EA EPML00562013 will remain the same.

Matters of state environmental significance (MSES⁶) and related matters

Medium Regulated vegetation:

- endangered and of concern regional ecosystems (REs)
- REs that intersect with a watercourse on Vegetation management (VM) watercourse map
- REs that intersect with a wetland on a VM wetland map
- REs that are also essential habitat for endangered and vulnerable species

Medium Connectivity areas

NA. Wetlands: wetland protection areas, high ecological significance wetlands, high ecological value wetlands and waterways

NA. Strategic environmental area

High Protected wildlife habitat:

- endangered and vulnerable protected flora
- Three types of koala habitat: bushland koala habitat, medium value rehabilitation habitat and high value rehabilitation habitat (SEQ)
- habitat for animal that is endangered, vulnerable or special least concern

NA. Protected areas part of State Forest under the Forestry Act 1959

NA. Highly protected marine park zones

NA. Fish habitat areas

NA. Watercourse providing for fish passage

NA. Marine plants

NA. Legally secured offset areas

Notes:

The Project is likely to have a significant residual impact on matters of state environmental significance (MSES) on 4 key areas:

1. Regulated vegetation – 23.4ha
2. Connectivity – 84.19ha
3. King bluegrass – 23.4ha
4. Ornamental snake – 167.84ha

Regulated Vegetation: The project has identified 31.44ha of 'Of Concern' RE 11.8.11 which is king bluegrass (*Dichanthium sericeum*).

Other

High Endangered, vulnerable and special least concern species (NC Act)⁷

Low Environmentally sensitive areas A, B and C

NA. Vegetation clearing

Medium Terrestrial ecology

NA. Groundwater-dependent ecosystems

Notes:

According to the Queensland Government ESA – Mining Activities mapping tool, the proposed amendment will impact on approximately 60.52ha of Category B Endangered Regional Ecosystems on RE11.7.1 which has a biodiversity status of 'Of Concern' and a Vegetation Management Act class of 'Least Concern'.

According to the Terrestrial Ecology Assessment provided with the application, the disturbance footprint was ground-truthed to confirm the presence of the following endangered REs:

- Endangered HVR RE 11.3.1: ~0.09ha
- Endangered regrowth RE 11.4.8: ~0.14ha
- Endangered regrowth RE 11.4.9: ~497.88ha

The listed ESAs are not categorised as MSES areas and therefore the applicant does not anticipate that an environmental offset is required.

Matters of national environmental significance (MNES)

High Listed threatened species and ecological communities under the EPBC Act

NA. Great Barrier Reef Marine Park

NA. Wetlands of International importance

NA. Migratory species (international agreements)

NA. World Heritage Properties

NA. National Heritage places

NA. Commonwealth marine areas

NA. Nuclear actions

Commented [KE2]: Numbers don't match up with above

⁶ For definitions of MSES refer to schedule 2 of the Environmental Offsets Regulation 2014.

⁷ NC Act – Nature Conservation Act 1992

Connectivity Areas: The project has identified 84.19ha of connectivity area which was ground-truthed by the applicant as remnant REs. This comprises of RE 11.8.11 and 11.7.1 The Terrestrial Ecology Report identified 112.4ha of remnant vegetation

Protected Wildlife Habitat: According to the proposed amendment provided by the applicant, there are a number of areas relating to six species with protected wildlife habitat which will be impacted by the project. This includes the following:

- Known to occur:
 - King bluegrass (vulnerable): 23.4ha;
 - Ornamental snake (vulnerable): 167.84ha (preferred habitat);
 - Squatter Pigeon (vulnerable): 54.82ha (preferred habitat) and 28.71ha (suitable)
- Likely/potential to occur:
 - Common death adder (vulnerable): 80.47ha;
 - Australian painted snipe (vulnerable): 1.8ha;
 - Short-beaked echidna (special least concern): 595.03ha

The applicant has indicated that there will likely be a significant residual impact on king bluegrass and ornamental snake habitat, however this is also a EPBC Act listed threatened species so will be managed under the EPBC assessment process. Furthermore, the applicant has indicated a significant residual impact to squatter pigeon and the Australian painted snipe are not anticipated, and as this constitutes an MNES impact it will be assessed under the EPBC Act.

The applicant has also anticipated that there will be a significant residual impact on MSES areas from the project on regulated vegetation and connectivity areas. The assessment of the EA amendment will consider whether the other MSES impacts (common death adder and short-beaked echidna) would also constitute a significant residual impact.

High A water resource in relation to CSG and large coal mining developments (IESC)

Notes:

There are three EPBC Act listed threatened species (one flora species and two fauna species) which have been identified in the disturbance footprint of the project as known or likely to occur within the area, this includes:

- King bluegrass: 23.4ha;
- Ornamental snake: 167.84ha (preferred habitat); and
- Squatter pigeon: 54.82ha (preferred habitat) and 28.71 (suitable habitat).

The Australian painted snipe (1.8ha) also has the potential to occur with intermittent foraging habitat recorded.

It is anticipated that there will be a significant residual impact to MNES areas (king bluegrass and ornamental snake). The CVM proposed amendment has already been submitted to the Federal Government Environment Minister or a delegate for formal assessment and approval. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Commented [KE3]: Note for information request Does it align with state mapping, if not it will need to go to the Herbarium for assessment. They will need

Coastal issues

- NA. Coastal hazard (erosion, storm tide inundation)
- NA. Structures (jetties, pontoons, seawalls)
- NA. Reclamation
- NA. Port development
- NA. Dredging and spoil disposal
- NA. Quarry material extraction from tidal water
- NA. Artificial waterways (canal estates, lakes)
- NA. Impacts on marine systems
- NA. Coastal resources (natural and physical features such as beaches, dunes, wetlands; processes and landforms; vegetation, wildlife etc.)
- NA. Public access to coastal and marine resources

Notes:

None of the above matters are identified to be located within or in the immediate vicinity of the proposed Horse Pit Extension. Therefore, coastal issues are unlikely.

Tenure issues

- NA. Protected areas
- NA. Native title interests
- NA. Offshore jurisdiction
- NA. Commonwealth jurisdiction
- NA. Interstate jurisdiction
- NA. Legally secured offset area
- NA. Occupancy of unallocated state land under tidal waters

Notes:

The Horse Pit Extension will require the grant of two additional surface area rights by the Department of Resources. An application has been lodged by the applicant to the Department of Resources and therefore the public notification of the Horse Pit Extension will be conducted as a coordinated approach run by the Department of Resources.

The joint EA holders of EA EPML00562013 currently hold a majority of the underlying land tenures. Therefore it is not anticipated that tenure issues are likely.

Resource allocation

- Low Mining
- NA. Gas / Petroleum
- NA. Quarry material allocation under the CPM Act (quarry material extraction from below tidal water)
- Low Water allocation
- NA. Occupancy of fish habitat area (resource allocation under the Fisheries Act)
- NA. Commercial opportunities on national parks and marine parks
- Low Allocation of public resources (e.g. physical and natural resources environmental capacity)

Notes:

The proposed amendment is not anticipated to significantly increase the intensity of the relevant activity beyond what is currently approved with no change in the rate of extraction. The application states that Caval Ridge mine will continue to produce up to 15 million tonnes per annum (Mtpa) of ROM coal, this information is currently missing from the EA and therefore the EA will be amended to specify this production limit. Caval Ridge Mine also processes ROM coal from Peak Downs onsite and therefore further details regarding this arrangement will be sought in the information request including:

- Production limits from both Caval Ridge Mine and Peak Downs Mine;
- The production of waste from each site as well as the volume of waste from Caval Ridge versus Peak Downs Mine that is disposed of at Caval Ridge. This information gap may highlight a current issue with the current arrangement and why an additional overburden dump at Caval Ridge Mine is being sought by the proposed amendment.

There are no changes to the approved mining methods proposed and material characteristics of coal and overburden remain unchanged. The proposed amendment will result in an additional 910.7ha of disturbance to the current disturbance footprint of 6,306ha (current ERC decision) resulting in an approximate 14% increase in surface area disturbance. Additional information regarding the necessity of this amount of proposed disturbance particularly around the proposed out of pit dump will be addressed in the information request.

Water issues

Low Water quality
Low Discharges
Low Groundwater
Low Surface water
Low Hydrology
NA. Diversions
Low Cumulative impacts (e.g. groundwater)
Low Impacts on stream flows (geomorphological)
NA. Impacts on bank stability
Unknown Waterways management
NA. Impacts on freshwater systems
NA. Regulated structures (e.g. dams)
NA. Cumulative management areas under the *Water Act 2000*

Notes:

The applicant has stated that there is not anticipated to be an increase in the demand for water and the current mine water system will maximise water re-use for dust suppression and coal processing. Additional water management infrastructure is being proposed as well as the relocation of dams currently located within the project site. However, it is not anticipated that there will be an increase in the need for mine affected water (MAW) dams. The proposed amendment is unlikely to result in additional discharges to waters beyond what is currently authorised. There are no additional discharge points proposed and no change in release limits to waters.

There are currently 4 minor ephemeral drainage lines which occur within the proposed project site. The applicant has stated that the minor drainage lines do not require a diversion and therefore will be mined through as mining progresses. According to section 5(3) of the *Water Act 2000*, a watercourse does not include a drainage feature.

The proposed construction of the Horse Pit North levee and the Horse Pit West levee is modelled to achieve flood immunity for the project for up to and including a 0.1% Annual Exceedance Probability (AEP) event. The construction of the levees and the Horse Pit Crossing for the haul trucks will occur during the dry season to minimise soil disturbance to the adjacent waterways and will be in line with the current Erosion and Sediment Control Plan.

Furthermore, in terms of surface water run-off, the applicant has stated that the proposed changes "are unlikely to cause changes to the flow regime that may result in impacts to downstream users or the environment"

Air issues

Low Air shed management
High Pollution
High Health
High Nuisance
NA. Ecological impacts
NA. Odour

Notes:

The proposed amendment triggered the requirement for public notification based on the risk associated with the project's air quality impacts. According to the application, the frequency of dust emission exceedances is anticipated to increase as well as the predicted monthly average dust deposition over the life of mine at sensitive receptors located at Site 6 (Long Pocked Rd) and Site 8 (Moranbah Airport). Furthermore there is anticipated to be a significant increase in the operational risk for PM10 concentrations for most sensitive receptor locations located at Site 2 (Surrogate for Moranbah Township); Site 6 (Long Pocket Road) and Site 8 (Moranbah Airport) which will result in impacts to the health and wellbeing of sensitive receptors.

The application documents have not specified the revised predictions based on proposed mitigation and management measures. The assessing officer is unable to identify if the implementation measures will be sufficient to demonstrate, as per the existing EA condition, that there will not be a substantial change in the concentration of PM10 at sensitive or commercial places once all reasonable and practical measures have been taken or that mitigation and management measures are predicted to reduce PM10 concentrations to a level compliant with the Environmental Protection (Air) Policy 2019, when measured at sensitive or commercial places.

There have been ongoing discussions with the applicant who is aware that further information will be sought as part of the information request to address the concerns regarding the justification for and suitability of mitigation measures and strategies to effectively be able to meet the current conditions of the EA.

Noise and vibration issues

Low	Community noise
Low	Transportation noise
Low	Industrial noise
Low	Ground vibration
Low	Airblast overpressure
Low	Low frequency
NA.	Marine noise (underwater)
NA.	Ecological impacts

Notes:

Extension of operations northward will bring mining activities closer in proximity to the town of Moranbah and the Moranbah Airport.

Noise assessment reports identified that there were two sensitive receptors that would be impacted by the proposed amendment where the applicant would not be able to comply with the noise limits specified in the CVM EA EPML00562013. It was predicted that in 2050 under adverse weather conditions, sensitive receptor R2 (881 Long Pocket Rd) and R7 (Skyville) would exceed the noise limits by 2dB and 1dB respectively. However, the applicant has stated within the supporting document that although this exceedance is determined to be negligible, the CVM will implement additional mitigation measures to reduce noise emissions at these sensitive locations and will ensure compliance CVM is compliant with their EA noise conditions.

The noise mitigation and management strategies are deemed appropriate to reduce the noise impacts for sensitive receptors and ensure the applicant complies with current conditions of the EA. These strategies include:

- The progressive replacement of standard steel rollers with relatively quieter polymer rollers which is anticipated to result in a decrease in noise emissions by 5dB; and
- The installation of noise suppression kits on dozers working on the proposed out of pit dump;
- Design of the out of pit dump and operation of dozers on the out of pit dump.

The applicant's Noise and Vibration Impact Assessment stated that the Horse Pit extension is anticipated to comply with the current EA conditions regarding blasting or vibration impacts and therefore the current mitigation measures and management strategies will continue to operate.

Waste issues

NA.	Solid waste
NA.	Liquid waste
NA.	Gaseous waste
NA.	Dredge spoil disposal
NA.	Energy
NA.	Best practice environmental management
NA.	Waste water
High	Rock waste dumps
Low	Non-acid forming and potentially acid forming material

Notes:

The Horse Pit Extension will increase the quantity of waste rock and coal rejects generated due to the expanded scale of operations. The additional waste rock will be disposed of within the in-pit waste rock dump and the proposed out of pit dump.

The applicant has assessed and stated that there is limited potential for acid mine drainage from operations relating to the project.

The applicant has stated that the geological environment and geochemical characteristics between the existing Horse Pit and the proposed extension are consistent and therefore current mitigation and management strategies of waste product are not expected to change.

The only issue relates to the necessity of an additional out of pit dump as opposed to increasing the backfilling of the existing pit. As previously mentioned, this will be addressed in the information request.

Land issues

High	Land disturbance
Low	Contaminated land
NA.	Acid sulfate soils
Low	Erosion/stability
NA.	Subsidence
Low	Landscape
Unknown	Effects on hydrology (surface and underground)
Low	Sustainable use
Low	Land use history and compatibility
Low	Areas of regional interest ⁸
NA.	Compliance with planning schemes
High	Rehabilitation and subsequent use
NA.	Native title rights
NA.	Rehabilitation issues (for existing activities)
Low	Non-acid forming and potentially acid forming material
High	Final voids
High	Progressive rehabilitation and closure plan

Notes:

An additional 910.71ha of disturbance is proposed to the current disturbance footprint of 6,306ha (as per the current ERC decision) resulting in an approximate 14% increase in surface area disturbance.

The proposed amendment has stated that a final void of 680ha will remain as the final landform design. The application provides conflicting information and it is not clear whether this final void will be able to sustain the stated post-mining land use of a useable water storage or biologically viable water resource or if the final void will result in the stated non-use management area (NUMA). If the void is left as a NUMA this would result in up to 680ha of land lost as a future productive resource.

The assessing officer is not satisfied that there is currently sufficient information justifying the appropriateness of the final void for either of the post-mining land uses or as a non-use management area. Further information will be sought during the information request.

The Caval Ridge Mine progressive rehabilitation and closure plan is due to be submitted on 1 December 2022. This date may conflict with the current EA amendment assessment.

Cultural and heritage issues

NA.	Aboriginal and Torres Strait Islander cultural sites
NA.	European cultural heritage significance (historic sites, buildings and locations)
NA.	Queensland heritage place (<i>Queensland Heritage Act 1992</i>)
NA.	Designated landscape area (<i>Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987</i>)
NA.	Native title rights

Notes:

None of the above matters are identified as being located within or in the immediate vicinity of the proposed Horse Pit Extension area. Therefore, there are likely to be no cultural and heritage issues.

***Further information regarding Cultural Heritage can be addressed in the Information Request?**

⁸ <https://planning.dsdmip.qld.gov.au/planning/regional-planning-interests-act/areas-of-regional-interest>

Impacts on surrounds and transport

Low Transportation (air, rail, road, port, shipping)
NA. Visual impacts
Medium Compatibility with surrounding uses, activities and land users
NA. Adjacent landholders
Medium Amenity
Medium Community & landholder views
NA. Lighting

Notes:

The proposed amendment will extend the current Caval Ridge Mine by approximately 30 years ensuring jobs for the local communities and utilising existing roads and transportation requirements. Caval Ridge Mine is already located in close proximity to the town of Moranbah and the Moranbah airport with the proposed extension bringing the mine even closer.

It is uncertain at this point whether there will be any issues of the proposed project on the public safety (or perception of public safety) of air travel particularly in regard to the closer proximity of the Horse Pit to the airport and consequently the impacts from air quality, lighting impacts and the reduction in land availability. These potential issues will be addressed in the information request to ensure public safety.

Social issues

Low Accommodation
Low Transport of workers
NA. Fly-in/fly-out (*Strong and Sustainable Resource Communities Act 2017*)
NA. Drive-in/drive-out (*Strong and Sustainable Resource Communities Act 2017*)
NA. Displacement of use
Medium Public safety
NA. Politics/policy
Medium Compatibility with surrounding uses, activities and land users

Notes:

The proposed Horse Pit Extension will ensure the current workforce of employees, contractors and local businesses reliant on the operation of the Caval Ridge Mine continue to have work available for an additional ~30 years.

It is not anticipated that the extension of the life of mine at Caval Ridge will

PART B – TRIGGER CRITERIA

An EIS will be required if any of the following trigger criteria are met. If no criteria are triggered, this does not provide an exemption from having to prepare an EIS if the administering authority for the department considers that there may be a significant environmental impact, or there is a high level of uncertainty about the possible impacts, or there is a high level of public interest in the proposal.

For each question, indicate whether the answer is 'yes' or 'no':

Criteria	Yes	No
For greenfield (new) mine proposals (sections 70 or 143 of the EP Act)		
1. Would the application involve the removal of two million tonnes per year or more of run-of-mine (ROM) ⁹ ore or coal?	☐	☒
2. Would the application involve the removal of one million tonnes per year or more of run-of-mine (ROM) ore or coal on or under a floodplain ¹⁰ or in a coastal hazard area ¹¹ ?	☐	☒
3. Would the application involve the introduction of a novel or unproven resource extraction process, technology or activity ¹² ?	☐	☒
For proposals to amend/alter an existing mine (sections 143 and 228 of the EP Act)		
4. For mines already removing 2 – 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 100% or 5 million tonnes per year (whichever is the lesser)?	☐	☒
5. For mines already removing over 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 50% or 10 million tonnes per year (whichever is the lesser)?	☐	☒
6. For mines already removing more than 20 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 25%?	☐	☒
7. Would the application involve an extension into and significant impact on a Category A or B environmentally sensitive area, which is not already authorised by the State?	☐	☐
8. Would the application involve a substantial change in mining operations – such as from underground to open cut, or (for underground mining) a change in operations from one causing little subsidence to one likely to cause substantial subsidence?	☐	☒
9. Would the application introduce a novel or unproven resource removal process, technology or activity?	☐	☒
For petroleum and gas activities (sections 70, 143 and 228 of the EP Act)		

⁹ ROM ore or coal means the material excavated but prior to washing or chemical concentration. It does not include overburden.

¹⁰ The *Water Act 2000* defines a floodplain as an area of reasonably flat land adjacent to a watercourse that— (a) is covered from time to time by floodwater overflowing from the watercourse; and (b) does not, other than in an upper valley reach, confine floodwater to generally follow the path of the watercourse; and (c) has finer sediment deposits than the sediment deposits of any bench, bar or in-stream island in the watercourse. See also the Queensland Floodplain Assessment Overlay at the *Wetland Info* section of the department's website at <https://wetlandinfo.des.qld.gov.au/wetlands/>.

¹¹ A coastal hazard area is an area vulnerable to coastal hazards, referred to as coastal erosion or storm tide inundation (as per the departmental coastal hazard area mapping). Maps of these areas are accessible at http://www.des.qld.gov.au/coastal/management/coastal_plan_maps.php and <http://qldspatial.information.qld.gov.au/catalogue/custom/index.page>.

¹² For example: underground coal gasification; in-seam coal slurring; a new method of ore concentration; but this will be decided on a case-by-case basis and this trigger is not intended to discourage innovation.

10. Would the application involve a total disturbance area of greater than 2000 hectares at any one time during the life of the proposed project? This includes areas occupied by well pads (single or multi-directional), access tracks and roads, water storages, and process plants?	☐	☒
11. Would the application involve the construction of a high pressure pipeline over a distance of 300 kilometre or greater?	☐	☒
12. Would the application involve the construction of a liquefied natural gas plant?	☐	☒
General considerations		
Where needed, make comments on the rating of the application against the trigger criteria.		
The proposed project is anticipated to impact Category B ESAs, however it is not anticipated that the impact will be significant.		
The proposed amendment does not relate to a new greenfield mine proposal or to petroleum and gas activities, therefore these triggers are not applicable. The Caval Ridge Mine already removes over 10 million tonnes of ROM ore or coal and the current application does not increase the current annual removal rate by more than 50% or 10 million tonnes per year. Therefore the application to amend EA EPML00562013 does not trigger any of the above criteria for an amendment to an existing mine.		

PART C – STANDARD CRITERIA

The standard criteria have to be considered in making the EIS decision. Provide comments on the standard criteria as defined under schedule 4 of the EP Act (where relevant):

Standard criteria, EP Act, schedule 4, definitions (current as at 1 January 2018)¹³:

Standard criteria	Comment
Standard criteria means –	
(a) the following principles of environmental policy as set out in the Intergovernmental Agreement on the Environment— (i) the precautionary principle ; (ii) intergenerational equity ; (iii) conservation of biological diversity and ecological integrity ; and	<p>The assessing officer has considered the precautionary principle, intergenerational equity and conservation of biological diversity and ecological integrity.</p> <p>The assessing officer is satisfied that the proposed amendment will not introduce any novel or untested methodologies. Further, any threats of serious or irreversible environmental harm are able to be evaluated in the assessment of this application and subsequently managed by the applicant.</p> <p>The assessing officer is currently not satisfied that the proposed amendment will not deleteriously affect the health, diversity, and productivity of the environment for future generations. The amendment lacks details regarding:</p> <ul style="list-style-type: none"> • The applicant's ability to appropriately manage and mitigate air quality emissions; • Sufficient justification as to the necessity of an out of pit dump instead of backfilling the current Horse Pit; • Sufficient justification as to the extent of the final void; • The ability of the final void to sustain a post-mining use; and • If the final void is to remain as a non-use management area, the applicant has not provided additional studies and options to reduce the extent and consequently ensure more land is available for the use by future generations. <p>Although the assessing officer is not satisfied with the aforementioned aspects, these concerns will be addressed in an information request.</p> <p>The assessing officer is satisfied that the proposed amendment will not compromise biodiversity or ecological integrity. The majority of the land the subject of the amendment application has historically been cleared of vegetation for agricultural purposes and includes only minimal remnant vegetation. Furthermore, significant residual impacts to MNES</p>

¹³ Check standard criteria against latest version of the EP Act and amend if required
<https://www.legislation.qld.gov.au/view/html/inforce/current/act-1994-062>

	and MSES areas will require offsets prior to any disturbance to these areas.
(b) any Commonwealth or State government plans, standards, agreements or requirements about environmental protection or ecologically sustainable development; and	The assessing officer has considered the <i>Environmental Protection Act 1994</i> (EP Act), its subordinate legislation, the <i>Environmental Protection Regulation 2019</i> (EP Reg) and additional supporting policies.
(d) any relevant environmental impact study, assessment or report ; and	The assessing officer has considered all technical assessments and supporting information provided with the applicant.
(e) the character, resilience and values of the receiving environment; and	The assessing officer has considered the character, resilience and values of the receiving environment based on the information provided by the applicant within the application form and supporting information. Further, aside for air quality and the final void landform design (which will be addressed in the information request), the application's proposed management actions to maintain the character, resilience and values of the receiving environment, are likely to be sufficient, when combined with appropriate conditioning of EA EPML00562013.
(f) all submissions made by the applicant and submitters; and	The assessing officer has considered all application material submitted by the applicant. The application has triggered public notification under section 230 of the EP Act and therefore any submissions to the administering authority within the submission period will be considered.
(g) the best practice environmental management for activities under any relevant instrument, or proposed instrument, as follows— (i) an environmental authority; (ii) a transitional environmental program; (iii) an environmental protection order; (iv) a disposal permit; (v) a development approval; and	The assessing officer has considered the best practice environmental management for the proposed activities. The appropriate regulatory instrument is the EA EPML00562013, and management plans required by the EA. There are no relevant transitional environmental programs, environmental protection order, disposal permit or development approval relevant to the EA or this application.
(h) the financial implications of the requirements under an instrument, or proposed instrument, mentioned in paragraph (g) as they would relate to the type of activity or industry carried out, or proposed to be carried out, under the instrument; and	The assessing officer has considered the financial implications. It can be reasonably expected that the applicant, who initiated the amendment application, has considered any additional financial costs resulting from the extension to the project, and any resulting cost of continuing compliance with changes to the conditions of the EA. Therefore, any financial implications can reasonably be considered to be within the applicant's means to pay.
(i) the public interest ; and	The assessing officer has considered the public interest of the proposed amendment. As the project is located in close proximity to multiple sensitive receptors including the town of Moranbah and the Moranbah Airport, there is potential for public interest. The proposed amendment is subject to public notification in which time, the public will have the opportunity to make submissions.

	Additionally, with regards to all decisions, human rights have been considered and there are no reasonably foreseeable limitations for human rights under the Human Rights Act 2019.
(j) any relevant site management plan ; and	There are no relevant site management plans for the land that is subject of this application.
(k) any relevant integrated environmental management system or proposed integrated environmental management system; and	There is no relevant integrated environment management system or proposed integrated environmental management system applicable to the EA or this application.
(l) any other matter prescribed under a regulation.	There are no further matters prescribed under regulation (i.e. the EP Reg.) for consideration.
General considerations	
<p><i>Where needed, make comments on the rating of the application against the standard criteria.</i></p> <p>With consideration of the above comments, the proposed amendment application is reasonably expected to be compliant with the standard criteria as defined by Schedule 4 of the EP Act.</p>	

Date : 22/03/2022 12:31:39 AM

From : "Luisa Taufatofua"

To : "Kathryn Eller" Kathryn.Eller@des.qld.gov.au

Subject : Caval Ridge Horse Pit Extension CAC Report

Attachment : EA Amendment 20220322 CAC Report EPML00562013 BHP Coal Pty Ltd Caval Ridge Mine.docx;image001.png;

Hi Kathryn,

As promised, please find attached the draft Horse Pit Extension CAC Report for your review and feedback prior to sending it to Juliana.

Let me know if there are any questions or if you would like to discuss.

Kind regards,



Luisa Taufatofua
Senior Environmental Officer
Business Centre (Coal) | Coal and Central Qld Compliance
Department of Environment and Science

P 07 4987 9342
99 Hospital Road, Emerald QLD 4720
PO Box 3028, Emerald QLD 4720

Published on DESI Disclosure Log
RTI Act 2009

Report to CAC

Environmental Protection Act 1994

Coordinated assessment committee (CAC) report on the requirement for an environmental impact statement (EIS)

This internal report is for recommendations to the Department of Environment and Science CAC on whether an EIS is required for a project under sections 70, 73A, 143 and 228 of the Environmental Protection Act 1994 (EP Act).

When this report applies

The report format should be used for all resource applications meeting the requirements for a decision by CAC on whether an EIS is required under sections 70, 73C, 143 and 228 of the EP Act.

Specifically, this report should be used for:

- all site-specific resource applications for an environmental authority (EA) (s143 EP Act)
- applications that are major amendments to an EA (s228 EP Act)
- applications for voluntary preparation of an EIS (s70 EP Act)
- applications for: decisions on whether an EIS would be required for EA applications under s73A(1)(a) of the EP Act; and, if relevant, applications to prepare an EIS under s73A(1)(b) of the EP Act, if the chief executive decides an EIS would not be required for an EA application.

Note: this report is **not** for projects that have completed an EIS under the EP Act. It also does **not** apply to 'coordinated projects' under the *State Development and Public Works Organisation Act 1971*.

How to use this report format

This report should be prepared by the nominated assessment officer and should include a recommendation based on an assessment of:

- Part A (department interests)
- Part B (trigger criteria)
- Part C (standard criteria) of this CAC report.

Applications for major EA amendments should attach the assessment level decision (ALD decision) and supporting documentation, such as maps, to this CAC report. The CAC report must be approved and signed by the manager.

The completed CAC report should then be forwarded to Environmental Impact Assessment Team at eis@des.qld.gov.au, carbon copy (cc) to Pauline.Gregory@des.qld.gov.au and Chris.Loveday@des.qld.gov.au.



Applicant and project details

Project name	Caval Ridge Horse Pit Extension
Applicant name ¹	BHP Coal Pty Ltd
Project type	Mining black coal
Tenure details	ML70403; ML1775; ML70462
Project location	Caval Ridge Mine is located 7km south of Moranbah. The proposed Horse Pit Extension located towards the north west of the site.

Administrative details

Application type	Major amendment of a site-specific environmental authority.
Environmental authority no. (if relevant)	EPML00562013
eDOCS reference	101/0000190
Department business centre	Business Centre Coal
EIS decision due (max 3 bd after CAC report) ²	28 March 2022 (*20BD from payment of major fee)
Information request due (section 140 EP Act)	28 March 2022 (*20BD from payment of major fee)

¹ The 'applicant' is the persons, or registered legal entity (not a business trading name) intending to carry out the activity and in whose name the applicable permits or licences are to be issued.

² The EIS decision is due three business days (3 bd) after the CAC report is provided to CAC.

Recommendation³	
<p>After completing Parts A, B and C of this report, mark which of the following applies:</p> <p>(a) EIS is required.....☐</p> <p>(b) No EIS is required.....☒</p> <p>Statement of reasons:</p> <p>The assessing officer recommends that an EIS is not required for the major amendment regarding environmental authority EPML00562013. The major amendment application relates to the extension of the existing Horse Pit to the north east of Caval Ridge Mine, located on mining lease (ML) 1775, ML70403 and ML70462. The application, lodged 15 December 2021 by the principal applicant BHP Coal Pty Ltd, has been assessed against the 'EIS criteria for resource projects' (EIS criteria) as per section 3 of the Department's Guideline – 'Criteria for environmental impact statements for resource projects under the environmental Protection Act 1994' (ESR/2016/2167) (EIS Guideline).</p> <p>The assessing officer has considered the EIS criteria through reference to the application documents, the EIS guideline and the information contained within this report. As a result, the assessing officer has taken into account the following:</p> <ul style="list-style-type: none"> • the 'standard criteria' as per Schedule 4 of the Environmental Protection Act 1994 (EP Act); • the trigger criteria as per the EIS triggers for proposals to amend/alter an existing mine; • the relative magnitude of the project with regards to its scale and risk of impacts to environmental values; • the public interest with regards to the amendment and its impacts; • any uncertainties with regards to possible impacts; • any significant issues to be addressed by other Queensland Government or Commonwealth Government authorities; • the social and economic impacts; and • any cumulative impacts. <p>Further, the assessing officer is satisfied that any issues concerning the above can and will be resolved, without the need for an EIS.</p>	
Assessing officer: Luisa Taufatofua	Date: 22/03/2022
Delegate (EP Act): Juliana McCosker	Date: Click here to enter a date.

³ In making this recommendation, the department's guideline *Criteria for environmental impact statements for resource projects under the Environmental Protection Act 1994* (ESR/2016/2167) assists the administering authority to carry out its functions and responsibilities in accordance with the EP Act. This includes empowerment of the right to require an EIS for a resource development project if consideration of the standard criteria (and any other relevant considerations) shows an EIS should be required, irrespective of the triggers in this guideline.

PART A – DES INTERESTS

Additional approval processes required (attach details where necessary):

- ☐ None
- ☐ Other applications received by the department for project
- ☐ A process under the *State Development and Public Works Organisation Act 1971*
- ☒ Commonwealth processes under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- ☐ Other

The applicant has also submitted an application for approval under the EPBC Act which is currently under review. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Special considerations (attach details where necessary):

- ☐ Affects an environmentally sensitive area (Category A, B and/or C⁴)
- ☐ Involves a large number of individual decisions
- ☒ Is likely to generate significant community concern
- ☐ Needs policy change for approval
- ☐ Applicant suitability⁵
- ☐ Involves significant issues with another Queensland Government/Australian Government authority
- ☐ Involves impacts on an existing legally secured offset area under State and/or Commonwealth legislation
- ☐ Another special circumstance which significantly elevates environmental, social or economic risks beyond those usual for this type of project
- ☐ Other

The amendment is likely to generate significant community concern due to three primary factors:

1. The proposed Horse Pit Extension will bring mining activities within closer proximity to multiple sensitive receptors, specifically it will be located right next to the Moranbah airport and in close proximity to the town of Moranbah and other surrounding homesteads to the north.
2. Furthermore, the air quality impacts to sensitive receptors particularly at the Moranbah Airport or town of Moranbah is anticipated to increase significantly which could have issues to the health and wellbeing of sensitive receptors and the general public accessing these areas.
3. The amendment proposes for a final void of 680ha to remain following the closure of the mine. It is not clear whether this void will be able to sustain a post-mining land use or whether it will result in a non-use management area located in close proximity to the Moranbah airport, town of Moranbah and the adjoining highway.

On the other hand, the proposed project is anticipated to have numerous community benefits including the ongoing provision of jobs to those currently employed at Caval Ridge and localised benefits to the town of Moranbah.

Pre-lodgement advice

Provide information on date, who and what advice was given during the pre-lodgement meeting.

⁴ Refer to guideline ESR/2016/1985: 'Eligibility criteria and standard conditions for exploration and mineral development projects'

⁵ Refer to guideline ESR/2015/1771: 'Application to be a registered suitable operator'.

20 October 2020: A Technical Workshop 1 was held between DES, BHP (applicant) and SLR (Consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focussed on air quality, noise, land and geochemistry.

- Air quality: No questions from DES.
- Noise and Vibration: DES queried how old the data proposed to be used for cumulative impact assessments was.
- Land: DES queried the depth of topsoil and stated that DES will be looking very closely at topsoil management going forward.
- Geochemistry: No questions from DES.

21 October 2020: A Technical Workshop 2 was held between DES, DAWE and BHP (applicant) and SLR (consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focussed on terrestrial ecology, GDEs, Groundwater and Surface Water.

- Terrestrial Ecology: DES had queries around Horse Creek, herbarium mapping and that offsets may be required.
- Groundwater: DES had queries around mapping and details of proposed bores.
- GDEs: DES reiterated that it is not DES's role to comment on the methodology of the assessments but to assess the assessment. DES also expressed those reports, documents and technical information would need to be provided prior to DES providing any detailed feedback.
- Surface Water: DES queried any interactions between pit flows and surface water flows to Horse Creek which SLR consulting confirmed there would be no interactions.

19 August 2021: A pre-lodgement meeting was held between DES and BHP to discuss the Caval Ridge Horse Pit Extension Project. At this meeting a site visit was organised to be held on 28 August 2021.

28 August 2021: A site visit was undertaken to Caval Ridge.

Other issues

Provide information on any other issue not covered in this CAC report.

The application was submitted on 15 December 2021 and on 17 January 2022, it was determined that the amendment be a major amendment requiring public notification. The project was deemed to be likely to be a substantial increase in the risk of environmental harm and the risk is the result of a substantial change in the results of the release of a quantity or quality of a contaminant permitted to be released into the environment. This was triggered due to the significant increase in the air quality impacts predicted from the study particularly around dust and PM10 emissions. The air quality technical report provided with the application did not provide sufficient justification that the applicant would be able to reduce the air quality impacts to below the 10% trigger limit. On 18 January 2022 and 10 February 2022, the Department had a meeting with the applicants to discuss the issues regarding the air quality impacts. The applicant advised that they would be providing updated technical reports to demonstrate how Caval Ridge will be able to reduce the air quality impacts and comply with the conditions of the EA.

DES interests

If an impact is indicated, provide information on the level and significance of the impact on the matter

Background

On 15 December 2021, the administering authority (the Department of Environment and Science [DES]) received an application for an amendment to EA EPML00562013 which is held by the Central Queensland Coal Associates Joint Venture (CQCA JV) with BM Alliance Coal Operations Pty Ltd (BMA) as both the manager and the agent on behalf of the CQCA JV. Caval Ridge Mine is located on mining lease (ML) 1775, ML70403 and ML70462 and is approximately 7km south of Moranbah in the Bowen Basin, Queensland.

Amendment Description

The applicant proposes to extend an existing northern mine pit, named Horse Pit. This will result in a revised life of mine from 2026 to 2056, adding 30 years to the operation to that of existing approvals. The Horse Pit Extension Project proposes an additional 910.71 ha of disturbance and will include:

- The extension of the Horse Pit (655.65 ha in the north east of ML 1775);
- The addition of an out of pit dump (107.31 ha) in the northwest of ML 70403;
- The relocation of existing infrastructure located within the proposed Horse Pit extension site including the EME Build Pad, blasting compound with two potential relocation options, back access roads, substations, go-lines and powerlines;
- The construction of two additional regulated flood levees to protect the proposed project area from potential flood events (up to 0.1% Annual Exceedance Probability (AEP)).
- The northern (Horse Pit North) levee will be approximately 1.4km in length and bounds a portion of Horse Pit in the north of the proposed pit; and
- The western (Horse Pit West) levee will be approximately 400m in length and located within the south west extent of the proposed out of pit dump.
- The construction of a bridge over Horse Creek and the extension of the haul road to the north west of ML 70403 to access the proposed out of pit dump
- The construction of sediment dams as well as both clean water and MAW diversion drains to manage runoff from the proposed OOPD;
- The relocation of the Peak Downs Highway dragline crossing; and
- A Post-closure rehabilitated final landform with a single final void of approximately 680ha in the far east of ML1775.

CVM Justification for the proposed amendment

The Project proposes to extend the footprint of the existing Horse Pit at the CVM. As a result of exploiting efficiencies in mine sequencing and planning, mining activities are currently scheduled to reach the limit of the approved Horse Pit extent during Financial Year (FY) 2025, with some existing site infrastructure potentially being relocated from 2023. If approved, the extension is projected to extend the mine's life from the 2030s to the 2050s, protecting jobs and royalties into the future.

Significant mine engineering design has been undertaken to accommodate for the Project, which will utilise existing CVM infrastructure for coal processing, tailings disposal and rail loadout of product coal, amongst other things. The Project facilitates an opportunity to further contribute to Australia's position as a primary global producer of high-quality coking coal products. The Project will extract otherwise under-utilised resources from an area already disturbed by previous land uses which provides benefits over establishing a mine at a greenfield site. The extension of the mine life at CVM will also see further economic benefits to local and regional communities. Activities associated with the Project are not expected to cause environmental harm to

any nearby sensitive receptors such as residential housing and/or local businesses. However, mitigation measures will be implemented to prevent or minimise negative impacts on surrounding environmental values.

Other Matters

The applicant has provided an EIS Trigger Assessment in the 'EA Amendment Supporting Information' (refer Table 2-2 and Table 2-3 in which they have stated that no EIS triggers are relevant to the Project. The applicant has also stated that they anticipate that the ERAs listed on the current EA EPML00562013 will remain the same.

Published on DESI Disclosure Log
RTI Act 2009

Matters of state environmental significance (MSES⁶) and related matters

Medium Regulated vegetation:

- endangered and of concern regional ecosystems (REs)
- REs that intersect with a watercourse on Vegetation management (VM) watercourse map
- REs that intersect with a wetland on a VM wetland map
- REs that are also essential habitat for endangered and vulnerable species

Medium Connectivity areas

NA. Wetlands: wetland protection areas, high ecological significance wetlands, high ecological value wetlands and waterways

NA. Strategic environmental area

High Protected wildlife habitat:

- endangered and vulnerable protected flora
- Three types of koala habitat: bushland koala habitat, medium value rehabilitation habitat and high value rehabilitation habitat (SEQ)
- habitat for animal that is endangered, vulnerable or special least concern

NA. Protected areas part of State Forest under the Forestry Act 1959

NA. Highly protected marine park zones

NA. Fish habitat areas

NA. Watercourse providing for fish passage

NA. Marine plants

NA. Legally secured offset areas

Notes:

The Project is likely to have a significant residual impact on matters of state environmental significance (MSES) on 4 key areas:

1. Regulated vegetation – 23.4ha
2. Connectivity – 84.19ha
3. King bluegrass – 23.4ha
4. Ornamental snake – 167.84ha

Regulated Vegetation: The project has identified 31.44ha of 'Of Concern' RE 11.8.11 which is king bluegrass (*Dichanthium sericeum*).

Connectivity Areas: The project has identified 84.19ha of connectivity area which was ground-truthed by the applicant as remnant REs. This comprises of RE 11.8.11 and 11.7.1 The Terrestrial Ecology Report identified 112.4ha of remnant vegetation

Other

High Endangered, vulnerable and special least concern species (NC Act)⁷

Low Environmentally sensitive areas A, B and C

NA. Vegetation clearing

Medium Terrestrial ecology

NA. Groundwater-dependent ecosystems

Notes:

According to the Queensland Government ESA – Mining Activities mapping tool, the proposed amendment will impact on approximately 60.52ha of Category B Endangered Regional Ecosystems on RE11.7.1 which has a biodiversity status of 'Of Concern' and a Vegetation Management Act class of 'Least Concern'.

According to the Terrestrial Ecology Assessment provided with the application, the disturbance footprint was ground-truthed to confirm the presence of the following endangered REs:

- Endangered HVR RE 11.3.1: ~0.09ha
- Endangered regrowth RE 11.4.8: ~0.14ha
- Endangered regrowth RE 11.4.9: ~497.88ha

The listed ESAs are not categorised as MSES areas and therefore the applicant does not anticipate that an environmental offset is required.

Matters of national environmental significance (MNES)

High Listed threatened species and ecological communities under the EPBC Act

NA. Great Barrier Reef Marine Park

NA. Wetlands of International importance

NA. Migratory species (international agreements)

NA. World Heritage Properties

NA. National Heritage places

NA. Commonwealth marine areas

NA. Nuclear actions

High A water resource in relation to CSG and large coal mining developments (IESC)

Notes:

There are three EPBC Act listed threatened species (one flora species and two fauna species) which have been identified in the disturbance footprint of the project as known or likely to occur within the area, this includes:

- King bluegrass: 23.4ha;

⁶ For definitions of MSES refer to schedule 2 of the Environmental Offsets Regulation 2014.

⁷ NC Act – *Nature Conservation Act 1992*

Protected Wildlife Habitat: According to the proposed amendment provided by the applicant, there are a number of areas relating to six species with protected wildlife habitat which will be impacted by the project. This includes the following:

- Known to occur:
 - King bluegrass (vulnerable): 23.4ha;
 - Ornamental snake (vulnerable): 167.84ha (preferred habitat);
 - Squatter Pigeon (vulnerable): 54.82ha (preferred habitat) and 28.71ha (suitable)
- Likely/potential to occur:
 - Common death adder (vulnerable): 80.47ha;
 - Australian painted snipe (vulnerable): 1.8ha;
 - Short-beaked echidna (special least concern): 595.03ha

The applicant has indicated that there will likely be a significant residual impact on king bluegrass and ornamental snake habitat, however this is also a EPBC Act listed threatened species so will be managed under the EPBC assessment process. Furthermore, the applicant has indicated a significant residual impact to squatter pigeon and the Australian painted snipe are not anticipated, and as this constitutes an MNES impact it will be assessed under the EPBC Act.

The applicant has also anticipated that there will be a significant residual impact on MSES areas from the project on regulated vegetation and connectivity areas. The assessment of the EA amendment will consider whether the other MSES impacts (common death adder and short-beaked echidna) would also constitute a significant residual impact.

Coastal issues

- NA. Coastal hazard (erosion, storm tide inundation)
- NA. Structures (jetties, pontoons, seawalls)
- NA. Reclamation
- NA. Port development
- NA. Dredging and spoil disposal
- NA. Quarry material extraction from tidal water
- NA. Artificial waterways (canal estates, lakes)
- NA. Impacts on marine systems
- NA. Coastal resources (natural and physical features such as beaches, dunes, wetlands; processes and landforms; vegetation, wildlife etc.)

- Ornamental snake: 167.84ha (preferred habitat); and
- Squatter pigeon: 54.82ha (preferred habitat) and 28.71 (suitable habitat).

The Australian painted snipe (1.8ha) also has the potential to occur with intermittent foraging habitat recorded.

It is anticipated that there will be a significant residual impact to MNES areas (king bluegrass and ornamental snake). The CVM proposed amendment has already been submitted to the Federal Government Environment Minister or a delegate for formal assessment and approval. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Tenure issues

- NA. Protected areas
- NA. Native title interests
- NA. Offshore jurisdiction
- NA. Commonwealth jurisdiction
- NA. Interstate jurisdiction
- NA. Legally secured offset area
- NA. Occupancy of unallocated state land under tidal waters

Notes:

The Horse Pit Extension will require the grant of two additional surface area rights by the Department of Resources. An application has been lodged by the applicant to the Department of Resources and therefore the public notification of the Horse Pit

NA. Public access to coastal and marine resources

Extension will be conducted as a coordinated approach run by the Department of Resources.

Notes:

None of the above matters are identified to be located within or in the immediate vicinity of the proposed Horse Pit Extension. Therefore, coastal issues are unlikely.

The joint EA holders of EA EPML00562013 currently hold a majority of the underlying land tenures. Therefore it is not anticipated that tenure issues are likely.

Resource allocation

Low Mining

NA. Gas / Petroleum

NA. Quarry material allocation under the CPM Act (quarry material extraction from below tidal water)

Low Water allocation

NA. Occupancy of fish habitat area (resource allocation under the Fisheries Act)

NA. Commercial opportunities on national parks and marine parks

Low Allocation of public resources (e.g. physical and natural resources environmental capacity)

Notes:

The proposed amendment is not anticipated to significantly increase the intensity of the relevant activity beyond what is currently approved with no change in the rate of extraction. The application states that Caval Ridge mine will continue to produce up to 15 million tonnes per annum (Mtpa) of ROM coal, this information is currently missing from the EA and therefore the EA will be amended to specify this production limit. Caval Ridge Mine also processes ROM coal from Peak Downs onsite and therefore further details regarding this arrangement will be sought in the information request including:

- Production limits from both Caval Ridge Mine and Peak Downs Mine;
- The production of waste from each site as well as the volume of waste from Caval Ridge versus Peak Downs Mine that is disposed of at Caval Ridge. This information gap may highlight a current issue with the current arrangement and why an additional overburden dump at Caval Ridge Mine is being sought by the proposed amendment.

There are no changes to the approved mining methods proposed and material characteristics of coal and overburden remain unchanged. The proposed amendment will result in an additional 910.7ha of disturbance to the current disturbance footprint of 6,306ha (current ERC decision) resulting in an approximate 14% increase in surface area disturbance. Additional information regarding the necessity of this amount of proposed disturbance particularly around the proposed out of pit dump will be addressed in the information request.

Water issues

Low Water quality

Low Discharges

Low Groundwater

Low Surface water

Low Hydrology

NA. Diversions

Low Cumulative impacts (e.g. groundwater)

Low Impacts on stream flows (geomorphological)

NA. Impacts on bank stability

Unknown Waterways management

NA. Impacts on freshwater systems

NA. Regulated structures (e.g. dams)

Air issues

Low Air shed management

High Pollution

High Health

High Nuisance

NA. Ecological impacts

NA. Odour

Notes:

The proposed amendment triggered the requirement for public notification based on the risk associated with the project's air quality impacts. According to the application, the frequency of dust emission exceedances is anticipated to increase as well as the predicted monthly average dust deposition over the

NA. Cumulative management areas under the *Water Act 2000*

Notes:

The applicant has stated that there is not anticipated to be an increase in the demand for water and the current mine water system will maximise water re-use for dust suppression and coal processing.

Additional water management infrastructure is being proposed as well as the relocation of dams currently located within the project site. However, it is not anticipated that there will be an increase in the need for mine affected water (MAW) dams. The proposed amendment is unlikely to result in additional discharges to waters beyond what is currently authorised. There are no additional discharge points proposed and no change in release limits to waters.

There are currently 4 minor ephemeral drainage lines which occur within the proposed project site. The applicant has stated that the minor drainage lines do not require a diversion and therefore will be mined through as mining progresses. According to section 5(3) of the Water Act 2000, a watercourse does not include a drainage feature.

The proposed construction of the Horse Pit North levee and the Horse Pit West levee is modelled to achieve flood immunity for the project for up to and including a 0.1% Annual Exceedance Probability (AEP) event. The construction of the levees and the Horse Pit Crossing for the haul trucks will occur during the dry season to minimise soil disturbance to the adjacent waterways and will be in line with the current Erosion and Sediment Control Plan.

Furthermore, in terms of surface water run-off, the applicant has stated that the proposed changes “are unlikely to cause changes to the flow regime that may result in impacts to downstream users or the environment”

life of mine at sensitive receptors located at Site 6 (Long Pocked Rd) and Site 8 (Moranbah Airport). Furthermore there is anticipated to be a significant increase in the operational risk for PM10 concentrations for most sensitive receptor locations located at Site 2 (Surrogate for Moranbah Township); Site 6 (Long Pocket Road) and Site 8 (Moranbah Airport) which will result in impacts to the health and wellbeing of sensitive receptors.

The application documents have not specified the revised predictions based on proposed mitigation and management measures. The assessing officer is unable to identify if the implementation measures will be sufficient to demonstrate, as per the existing EA condition, that there will not be a substantial change in the concentration of PM10 at sensitive or commercial places once all reasonable and practical measures have been taken or that mitigation and management measures are predicted to reduce PM10 concentrations to a level compliant with the Environmental Protection (Air) Policy 2019, when measured at sensitive or commercial places.

There have been ongoing discussions with the applicant who is aware that further information will be sought as part of the information request to address the concerns regarding the justification for and suitability of mitigation measures and strategies to effectively be able to meet the current conditions of the EA.

Noise and vibration issues

Low	Community noise
Low	Transportation noise
Low	Industrial noise
Low	Ground vibration
Low	Airblast overpressure
Low	Low frequency
NA.	Marine noise (underwater)
NA.	Ecological impacts

Notes:

Extension of operations northward will bring mining activities closer in proximity to the town of Moranbah and the Moranbah Airport.

Noise assessment reports identified that there were two sensitive receptors that would be impacted by the proposed amendment where the applicant would not be able to comply with the noise limits specified in the CVM EA EPML00562013. It was predicted that in 2050 under adverse weather conditions, sensitive receptor R2 (881 Long Pocket Rd) and R7 (Skyville) would exceed the noise limits by 2dB and 1dB respectively. However, the applicant has stated within the supporting document that although this exceedance is determined to be negligible, the CVM will implement additional mitigation measures to reduce noise emissions at these sensitive locations and will ensure compliance CVM is compliant with their EA noise conditions.

The noise mitigation and management strategies are deemed appropriate to reduce the noise impacts for sensitive receptors and ensure the applicant complies with current conditions of the EA. These strategies include:

- The progressive replacement of standard steel rollers with relatively quieter polymer rollers which is anticipated to result in a decrease in noise emissions by 5dB; and
- The installation of noise suppression kits on dozers working on the proposed out of pit dump;
- Design of the out of pit dump and operation of dozers on the out of pit dump.

The applicant's Noise and Vibration Impact Assessment stated that the Horse Pit extension is anticipated to comply with the current EA conditions regarding blasting or vibration impacts and therefore the current mitigation measures and management strategies will continue to operate.

Land issues

High	Land disturbance
Low	Contaminated land

Waste issues

NA.	Solid waste
NA.	Liquid waste
NA.	Gaseous waste
NA.	Dredge spoil disposal
NA.	Energy
NA.	Best practice environmental management
NA.	Waste water
High	Rock waste dumps
Low	Non-acid forming and potentially acid forming material

Notes:

The Horse Pit Extension will increase the quantity of waste rock and coal rejects generated due to the expanded scale of operations. The additional waste rock will be disposed of within the in-pit waste rock dump and the proposed out of pit dump.

The applicant has assessed and stated that there is limited potential for acid mine drainage from operations relating to the project.

The applicant has stated that the geological environment and geochemical characteristics between the existing Horse Pit and the proposed extension are consistent and therefore current mitigation and management strategies of waste product are not expected to change.

The only issue relates to the necessity of an additional out of pit dump as opposed to increasing the backfilling of the existing pit. As previously mentioned, this will be addressed in the information request.

Cultural and heritage issues

NA.	Aboriginal and Torres Strait Islander cultural sites
-----	--

NA. Acid sulfate soils
Low Erosion/stability
NA. Subsidence
Low Landscape
Unknown Effects on hydrology (surface and underground)
Low Sustainable use
Low Land use history and compatibility
Low Areas of regional interest⁸
NA. Compliance with planning schemes
High Rehabilitation and subsequent use
NA. Native title rights
NA. Rehabilitation issues (for existing activities)
Low Non-acid forming and potentially acid forming material
High Final voids
High Progressive rehabilitation and closure plan

Notes:

An additional 910.71ha of disturbance is proposed to the current disturbance footprint of 6,306ha (as per the current ERC decision) resulting in an approximate 14% increase in surface area disturbance.

The proposed amendment has stated that a final void of 680ha will remain as the final landform design. The application provides conflicting information and it is not clear whether this final void will be able to sustain the stated post-mining land use of a useable water storage or biologically viable water resource or if the final void will result in the stated non-use management area (NUMA). If the void is left as a NUMA this would result in up to 680ha of land lost as a future productive resource.

The assessing officer is not satisfied that there is currently sufficient information justifying the appropriateness of the final void for either of the post-mining land uses or as a non-use management area. Further information will be sought during the information request.

The Caval Ridge Mine progressive rehabilitation and closure plan is due to be submitted on 1 December 2022. This date may conflict with the current EA amendment assessment.

Impacts on surrounds and transport

Low Transportation (air, rail, road, port, shipping)
NA. Visual impacts
Medium Compatibility with surrounding uses, activities and land users
NA. Adjacent landholders

NA. European cultural heritage significance (historic sites, buildings and locations)
NA. Queensland heritage place (*Queensland Heritage Act 1992*)
NA. Designated landscape area (*Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987*)
NA. Native title rights

Notes:

None of the above matters are identified as being located within or in the immediate vicinity of the proposed Horse Pit Extension area. Therefore, there are likely to be no cultural and heritage issues.

***Further information regarding Cultural Heritage can be addressed in the Information Request?**

Social issues

Low Accommodation
Low Transport of workers
NA. Fly-in/fly-out (*Strong and Sustainable Resource Communities Act 2017*)

⁸ <https://planning.dsdmip.qld.gov.au/planning/regional-planning-interests-act/areas-of-regional-interest>

MediumAmenity

MediumCommunity & landholder views

NA. Lighting

Notes:

The proposed amendment will extend the current Caval Ridge Mine by approximately 30 years ensuring jobs for the local communities and utilising existing roads and transportation requirements. Caval Ridge Mine is already located in close proximity to the town of Moranbah and the Moranbah airport with the proposed extension bringing the mine even closer.

It is uncertain at this point whether there will be any issues of the proposed project on the public safety (or perception of public safety) of air travel particularly in regard to the closer proximity of the Horse Pit to the airport and consequently the impacts from air quality, lighting impacts and the reduction in land availability. These potential issues will be addressed in the information request to ensure public safety.

NA. Drive-in/drive-out (*Strong and Sustainable Resource Communities Act 2017*)

NA. Displacement of use

MediumPublic safety

NA. Politics/policy

MediumCompatibility with surrounding uses, activities and land users

Notes:

The proposed Horse Pit Extension will ensure the current workforce of employees, contractors and local businesses reliant on the operation of the Caval Ridge Mine continue to have work available for an additional ~30 years.

It is not anticipated that the extension of the life of mine at Caval Ridge will

PART B – TRIGGER CRITERIA

An EIS will be required if any of the following trigger criteria are met. If no criteria are triggered, this does not provide an exemption from having to prepare an EIS if the administering authority for the department considers that there may be a significant environmental impact, or there is a high level of uncertainty about the possible impacts, or there is a high level of public interest in the proposal.

For each question, indicate whether the answer is ‘yes’ or ‘no’:

Criteria	Yes	No
For greenfield (new) mine proposals (sections 70 or 143 of the EP Act)		
1. Would the application involve the removal of two million tonnes per year or more of run-of-mine (ROM) ⁹ ore or coal?	☐	☒
2. Would the application involve the removal of one million tonnes per year or more of run-of-mine (ROM) ore or coal on or under a floodplain ¹⁰ or in a coastal hazard area ¹¹ ?	☐	☒
3. Would the application involve the introduction of a novel or unproven resource extraction process, technology or activity ¹² ?	☐	☒
For proposals to amend/alter an existing mine (sections 143 and 228 of the EP Act)		
4. For mines already removing 2 – 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 100% or 5 million tonnes per year (whichever is the lesser)?	☐	☒
5. For mines already removing over 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 50% or 10 million tonnes per year (whichever is the lesser)?	☐	☒
6. For mines already removing more than 20 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 25%?	☐	☒
7. Would the application involve an extension into and significant impact on a Category A or B environmentally sensitive area, which is not already authorised by the State?	☐	☐
8. Would the application involve a substantial change in mining operations – such as from underground to open cut, or (for underground mining) a change in operations from one causing little subsidence to one likely to cause substantial subsidence?	☐	☒

⁹ ROM ore or coal means the material excavated but prior to washing or chemical concentration. It does not include overburden.

¹⁰ The *Water Act 2000* defines a floodplain as an area of reasonably flat land adjacent to a watercourse that— (a) is covered from time to time by floodwater overflowing from the watercourse; and (b) does not, other than in an upper valley reach, confine floodwater to generally follow the path of the watercourse; and (c) has finer sediment deposits than the sediment deposits of any bench, bar or in-stream island in the watercourse. See also the Queensland Floodplain Assessment Overlay at the *Wetland Info* section of the department's website at <https://wetlandinfo.des.qld.gov.au/wetlands/>.

¹¹ A coastal hazard area is an area vulnerable to coastal hazards, referred to as coastal erosion or storm tide inundation (as per the departmental coastal hazard area mapping). Maps of these areas are accessible at http://www.des.qld.gov.au/coastal/management/coastal_plan_maps.php and <http://qldspatial.information.qld.gov.au/catalogue/custom/index.page>.

¹² For example: underground coal gasification; in-seam coal slurring; a new method of ore concentration; but this will be decided on a case-by-case basis and this trigger is not intended to discourage innovation.

9. Would the application introduce a novel or unproven resource removal process, technology or activity?	☐	☒
For petroleum and gas activities (sections 70, 143 and 228 of the EP Act)		
10. Would the application involve a total disturbance area of greater than 2000 hectares at any one time during the life of the proposed project? This includes areas occupied by well pads (single or multi-directional), access tracks and roads, water storages, and process plants?	☐	☒
11. Would the application involve the construction of a high pressure pipeline over a distance of 300 kilometre or greater?	☐	☒
12. Would the application involve the construction of a liquefied natural gas plant?	☐	☒
General considerations		
<p><i>Where needed, make comments on the rating of the application against the trigger criteria.</i></p> <p>The proposed project is anticipated to impact Category B ESAs, however it is not anticipated that the impact will be significant.</p> <p>The proposed amendment does not relate to a new greenfield mine proposal or to petroleum and gas activities, therefore these triggers are not applicable. The Caval Ridge Mine already removes over 10 million tonnes of ROM ore or coal and the current application does not increase the current annual removal rate by more than 50% or 10 million tonnes per year. Therefore the application to amend EA EPML00562013 does not trigger any of the above criteria for an amendment to an existing mine.</p>		

PART C – STANDARD CRITERIA

The standard criteria have to be considered in making the EIS decision. Provide comments on the standard criteria as defined under schedule 4 of the EP Act (where relevant):

Standard criteria, EP Act, schedule 4, definitions (current as at 1 January 2018)¹³:

Standard criteria	Comment
Standard criteria means –	
<p>(a) the following principles of environmental policy as set out in the Intergovernmental Agreement on the Environment—</p> <p style="padding-left: 40px;">(i) the precautionary principle;</p> <p style="padding-left: 40px;">(ii) intergenerational equity;</p> <p style="padding-left: 40px;">(iii) conservation of biological diversity and ecological integrity; and</p>	<p>The assessing officer has considered the precautionary principle, intergenerational equity and conservation of biological diversity and ecological integrity.</p> <p>The assessing officer is satisfied that the proposed amendment will not introduce any novel or untested methodologies. Further, any threats of serious or irreversible environmental harm are able to be evaluated in the assessment of this application and subsequently managed by the applicant.</p> <p>The assessing officer is currently not satisfied that the proposed amendment will not deleteriously affect the health, diversity, and productivity of the environment for future generations. The amendment lacks details regarding:</p> <ul style="list-style-type: none"> • The applicant's ability to appropriately manage and mitigate air quality emissions; • Sufficient justification as to the necessity of an out of pit dump instead of backfilling the current Horse Pit; • Sufficient justification as to the extent of the final void; • The ability of the final void to sustain a post-mining use; and • If the final void is to remain as a non-use management area, the applicant has not provided additional studies and options to reduce the extent and consequently ensure more land is available for the use by future generations. <p>Although the assessing officer is not satisfied with the aforementioned aspects, these concerns will be addressed in an information request.</p> <p>The assessing officer is satisfied that the proposed amendment will not compromise biodiversity or ecological integrity. The majority of the land the subject of the amendment application has historically</p>

¹³ Check standard criteria against latest version of the EP Act and amend if required
<https://www.legislation.qld.gov.au/view/html/inforce/current/act-1994-062>

Report
CAC report on the need for an EIS

	been cleared of vegetation for agricultural purposes and includes only minimal remnant vegetation. Furthermore, significant residual impacts to MNES and MSES areas will require offsets prior to any disturbance to these areas.
(b) any Commonwealth or State government plans, standards, agreements or requirements about environmental protection or ecologically sustainable development; and	The assessing officer has considered the <i>Environmental Protection Act 1994</i> (EP Act), its subordinate legislation, the <i>Environmental Protection Regulation 2019</i> (EP Reg) and additional supporting policies.
(d) any relevant environmental impact study, assessment or report ; and	The assessing officer has considered all technical assessments and supporting information provided with the applicant.
(e) the character, resilience and values of the receiving environment; and	The assessing officer has considered the character, resilience and values of the receiving environment based on the information provided by the applicant within the application form and supporting information. Further, aside for air quality and the final void landform design (which will be addressed in the information request), the application's proposed management actions to maintain the character, resilience and values of the receiving environment, are likely to be sufficient, when combined with appropriate conditioning of EA EPML00562013.
(f) all submissions made by the applicant and submitters; and	The assessing officer has considered all application material submitted by the applicant. The application has triggered public notification under section 230 of the EP Act and therefore any submissions to the administering authority within the submission period will be considered.
(g) the best practice environmental management for activities under any relevant instrument, or proposed instrument, as follows— (i) an environmental authority; (ii) a transitional environmental program; (iii) an environmental protection order; (iv) a disposal permit; (v) a development approval; and	The assessing officer has considered the best practice environmental management for the proposed activities. The appropriate regulatory instrument is the EA EPML00562013, and management plans required by the EA. There are no relevant transitional environmental programs, environmental protection order, disposal permit or development approval relevant to the EA or this application.
(h) the financial implications of the requirements under an instrument, or proposed instrument, mentioned in paragraph (g) as they would relate to the type of activity or industry carried out, or proposed to be carried out, under the instrument; and	The assessing officer has considered the financial implications. It can be reasonably expected that the applicant, who initiated the amendment application, has considered any additional financial costs resulting from the extension to the project, and any resulting cost of continuing compliance with changes to the conditions of the EA. Therefore, any financial implications can reasonably be considered to be within the applicant's means to pay.
(i) the public interest ; and	The assessing officer has considered the public interest of the proposed amendment. As the project is located in close proximity to multiple sensitive receptors including the town of Moranbah and the

Report
CAC report on the need for an EIS

	<p>Moranbah Airport, there is potential for public interest.</p> <p>The proposed amendment is subject to public notification in which time, the public will have the opportunity to make submissions.</p> <p>Additionally, with regards to all decisions, human rights have been considered and there are no reasonably foreseeable limitations for human rights under the Human Rights Act 2019.</p>
(j) any relevant site management plan ; and	There are no relevant site management plans for the land that is subject of this application.
(k) any relevant integrated environmental management system or proposed integrated environmental management system; and	There is no relevant integrated environment management system or proposed integrated environmental management system applicable to the EA or this application.
(l) any other matter prescribed under a regulation.	There are no further matters prescribed under regulation (i.e. the EP Reg.) for consideration.
General considerations	
<p><i>Where needed, make comments on the rating of the application against the standard criteria.</i></p> <p>With consideration of the above comments, the proposed amendment application is reasonably expected to be compliant with the standard criteria as defined by Schedule 4 of the EP Act.</p>	

Date : 5/04/2022 10:31:39 AM

From : "Luisa Taufatofua"

To : "Juliana Mccosker" Juliana.Mccosker@des.qld.gov.au

Cc : "Kathryn Eller" Kathryn.Eller@des.qld.gov.au

Subject : Caval Ridge Mine Horse Pit Extension CAC Report A-EA-AMD-100178679

Attachment : EA Amendment 20220404 CAC Report EPML00562013 BHP Coal Pty Ltd Caval Ridge Mine KE2_LT.docx;image001.png;

Hi Juliana,

Please find the Caval Ridge Mine Horse Pit Extension CAC Report for your review prior to sending it to Kate and Chris.

The document can be found here: <\\Mackay\groupdir\Environmental Services\MINING\MINES\3. ML's\Caval Ridge\Apps\2021\Horse Pit Expansion\CAC Report>

Let me know if there are any questions or comments.

Kind regards,



Luisa Taufatofua
Senior Environmental Officer
Business Centre (Coal) | Coal and Central Qld Compliance
Department of Environment and Science

P 07 4987 9342
99 Hospital Road, Emerald QLD 4720
PO Box 3028, Emerald QLD 4720

Published on DESI Disclosure Log
RTI Act 2009

Coordinated assessment committee (CAC) report on the requirement for an environmental impact statement (EIS)

This internal report is for recommendations to the Department of Environment and Science CAC on whether an EIS is required for a project under sections 70, 73A, 143 and 228 of the Environmental Protection Act 1994 (EP Act).

When this report applies

The report format should be used for all resource applications meeting the requirements for a decision by CAC on whether an EIS is required under sections 70, 73C, 143 and 228 of the EP Act.

Specifically, this report should be used for:

- all site-specific resource applications for an environmental authority (EA) (s143 EP Act)
- applications that are major amendments to an EA (s228 EP Act)
- applications for voluntary preparation of an EIS (s70 EP Act)
- applications for: decisions on whether an EIS would be required for EA applications under s73A(1)(a) of the EP Act; and, if relevant, applications to prepare an EIS under s73A(1)(b) of the EP Act, if the chief executive decides an EIS would not be required for an EA application.

Note: this report is **not** for projects that have completed an EIS under the EP Act. It also does **not** apply to 'coordinated projects' under the *State Development and Public Works Organisation Act 1971*.

How to use this report format

This report should be prepared by the nominated assessment officer and should include a recommendation based on an assessment of:

- Part A (department interests)
- Part B (trigger criteria)
- Part C (standard criteria) of this CAC report.

Applications for major EA amendments should attach the assessment level decision (ALD decision) and supporting documentation, such as maps, to this CAC report. The CAC report must be approved and signed by the manager.

The completed CAC report should then be forwarded to Environmental Impact Assessment Team at eis@des.qld.gov.au, carbon copy (cc) to Pauline.Gregory@des.qld.gov.au and Chris.Loveday@des.qld.gov.au.

Applicant and project details

Project name	Caval Ridge Horse Pit Extension
Applicant name ¹	BHP Coal Pty Ltd
Project type	Mining black coal
Tenure details	ML70403; ML1775; ML70462
Project location	Caval Ridge Mine is located 7km south of Moranbah. The proposed Horse Pit Extension located towards the north west of the site.

Administrative details

Application type	Major amendment of a site-specific environmental authority.
Environmental authority no. (if relevant)	EPML00562013
eDOCS reference	101/0000190
Department business centre	Business Centre Coal
EIS decision due (max 3 bd after CAC report) ²	11 April 2022 (*20BD from payment of major fee and 10BD extension)
Information request due (section 140 EP Act)	11 April 2022 (*20BD from payment of major fee and 10BD extension)

¹ The 'applicant' is the persons, or registered legal entity (not a business trading name) intending to carry out the activity and in whose name the applicable permits or licences are to be issued.

² The EIS decision is due three business days (3 bd) after the CAC report is provided to CAC.

Recommendation³

After completing Parts A, B and C of this report, mark which of the following applies:

(a) EIS is required.....☐

(b) No EIS is required.....☒

Statement of reasons:

The assessing officer recommends that an EIS is not required for the major amendment regarding environmental authority EPML00562013. The major amendment application relates to the extension of the existing Horse Pit to the north east of Caval Ridge Mine, located on mining lease (ML) 1775, ML70403 and ML70462. The application, lodged 15 December 2021 by the principal applicant BHP Coal Pty Ltd, has been assessed against the 'EIS criteria for resource projects' (EIS criteria) as per section 3 of the Department's Guideline – 'Criteria for environmental impact statements for resource projects under the environmental Protection Act 1994' (ESR/2016/2167) (EIS Guideline).

The assessing officer has considered the EIS criteria through reference to the application documents, the EIS guideline and the information contained within this report. As a result, the assessing officer has taken into account the following:

- the 'standard criteria' as per Schedule 4 of the *Environmental Protection Act 1994* (EP Act);
- the trigger criteria as per the EIS triggers for proposals to amend/alter an existing mine;
- the relative magnitude of the project with regards to its scale and risk of impacts to environmental values;
- the public interest with regards to the amendment and its impacts;
- any uncertainties with regards to possible impacts;
- any significant issues to be addressed by other Queensland Government or Commonwealth Government authorities;
- the social and economic impacts; and
- any cumulative impacts.

Further, the assessing officer is satisfied that any issues concerning the above can and will be resolved, without the need for an EIS.

Assessing officer: Luisa Taufatofua

Date: 5/04/2022

Delegate (EP Act): Juliana McCosker

Date: [Click here to enter a date.](#)

³ In making this recommendation, the department's guideline *Criteria for environmental impact statements for resource projects under the Environmental Protection Act 1994* (ESR/2016/2167) assists the administering authority to carry out its functions and responsibilities in accordance with the EP Act. This includes empowerment of the right to require an EIS for a resource development project if consideration of the standard criteria (and any other relevant considerations) shows an EIS should be required, irrespective of the triggers in this guideline.

PART A – DES INTERESTS

Additional approval processes required (attach details where necessary):

- ☐ None
- ☐ Other applications received by the department for project
- ☐ A process under the *State Development and Public Works Organisation Act 1971*
- ☒ Commonwealth processes under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- ☐ Other

The applicant has also submitted an application for approval under the EPBC Act which is currently under review. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Special considerations (attach details where necessary):

- ☒ Affects an environmentally sensitive area (Category A, B and/or C⁴)
- ☐ Involves a large number of individual decisions
- ☒ Is likely to generate significant community concern
- ☐ Needs policy change for approval
- ☐ Applicant suitability⁵
- ☐ Involves significant issues with another Queensland Government/Australian Government authority
- ☐ Involves impacts on an existing legally secured offset area under State and/or Commonwealth legislation
- ☐ Another special circumstance which significantly elevates environmental, social or economic risks beyond those usual for this type of project
- ☐ Other

According to the Queensland Government ESA – Mining Activities mapping tool, the proposed project is anticipated to impact Category B ESAs. However, this was ground-truthed by the applicant and the regrowth vegetation present in this area does not meet the definitions under the *Offsets Act* 2014 and therefore offsets will not be required.

The amendment is likely to generate significant community concern due to three primary factors:

1. The proposed Horse Pit Extension will bring mining activities within closer proximity to multiple sensitive receptors, specifically it will be located right next to the Moranbah airport and in close proximity to the town of Moranbah and other surrounding homesteads to the north.
2. Furthermore, the potential for air quality impacts to sensitive receptors, particularly at the Moranbah Airport or town of Moranbah, is anticipated to increase significantly which could have issues to the health and wellbeing of sensitive receptors and the general public accessing these areas.
3. The amendment proposes for a final void of 680ha to remain following the closure of the mine. It is not clear whether this void will be able to sustain a post-mining land use or whether

⁴ Refer to guideline ESR/2016/1985: 'Eligibility criteria and standard conditions for exploration and mineral development projects'

⁵ Refer to guideline ESR/2015/1771: 'Application to be a registered suitable operator'.

it will result in a non-use management area located in close proximity to the Moranbah airport, town of Moranbah and the adjoining highway.

On the other hand, the proposed project is anticipated to have numerous community benefits including the ongoing provision of jobs to those currently employed at Caval Ridge and localised benefits to the town of Moranbah.

Pre-lodgement advice

Provide information on date, who and what advice was given during the pre-lodgement meeting.

20 October 2020: A Technical Workshop 1 was held between DES, BHP (applicant) and SLR (Consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focussed on air quality, noise, land and geochemistry.

- Air quality: No questions from DES.
- Noise and Vibration: DES queried how old the data proposed to be used for cumulative impact assessments was.
- Land: DES queried the depth of topsoil and stated that DES will be looking very closely at topsoil management going forward.
- Geochemistry: No questions from DES.

21 October 2020: A Technical Workshop 2 was held between DES, DAWE and BHP (applicant) and SLR (consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focused on terrestrial ecology, GDEs, Groundwater and Surface Water.

- Terrestrial Ecology: DES had queries around Horse Creek, herbarium mapping and that offset may be required.
- Groundwater: DES had queries around mapping and details of proposed bores.
- GDEs: DES reiterated that it is not DES's role to comment on the methodology of the assessments but to assess the assessment. DES also expressed those reports, documents and technical information would need to be provided prior to DES providing any detailed feedback.
- Surface Water: DES queried any interactions between pit flows and surface water flows to Horse Creek which SLR consulting confirmed there would be no interactions.

19 August 2021: A pre-lodgement meeting was held between DES and BHP to discuss the Caval Ridge Horse Pit Extension Project. At this meeting a site visit was organised to be held on 28 August 2021.

28 August 2021: A site visit was undertaken to Caval Ridge.

Other issues

Provide information on any other issue not covered in this CAC report.

The application was submitted on 15 December 2021 and on 17 January 2022, it was determined that the amendment be a major amendment requiring public notification. The project was deemed to be likely to be a substantial increase in the risk of environmental harm and the risk is the result of a substantial change in the results of the release of a quantity or quality of a contaminant permitted to be released into the environment. This was triggered due to the significant increase in the air quality impacts predicted from the study particularly around dust and PM10 emissions. The air quality technical report provided with the application did not provide sufficient justification that the applicant would be able to reduce the air quality impacts to below the 10% trigger limit. On 18 January 2022 and 10 February 2022, the Department had a meeting with the applicants to discuss the issues

regarding the air quality impacts. The applicant advised that they would be providing updated technical reports to demonstrate how Caval Ridge will be able to reduce the air quality impacts and comply with the conditions of the EA. Such was to be provided following withdrawal of the application and subsequent resubmission. The applicant decided to progress with the application including public notification instead.

Published on DESI Disclosure Log
RTI Act 2009

DES interests

If an impact is indicated, provide information on the level and significance of the impact on the matter

Amendment Description

The applicant proposes to extend an existing northern mine pit, named Horse Pit. This will result in a revised life of mine from 2026 to 2056, adding 30 years to the operation to that of existing approvals. The Horse Pit Extension Project proposes an additional 910.71 ha of disturbance and will include:

- The extension of the Horse Pit (655.65 ha in the north east of ML 1775);
- The addition of an out of pit dump (107.31 ha) in the northwest of ML 70403;
- The relocation of existing infrastructure located within the proposed Horse Pit extension site including the EME Build Pad, blasting compound with two potential relocation options, back access roads, substations, go-lines and powerlines;
- The construction of two additional regulated flood levees to protect the proposed project area from potential flood events (up to 0.1% Annual Exceedance Probability (AEP)).
- The northern (Horse Pit North) levee will be approximately 1.4km in length and bounds a portion of Horse Pit in the north of the proposed pit; and
- The western (Horse Pit West) levee will be approximately 400m in length and located within the south west extent of the proposed out of pit dump.
- The construction of a bridge over Horse Creek and the extension of the haul road to the north west of ML 70403 to access the proposed out of pit dump
- The construction of sediment dams as well as both clean water and MAW diversion drains to manage runoff from the proposed out of pit dump (OOPD);
- The relocation of the Peak Downs Highway dragline crossing; and
- A Post-closure rehabilitated final landform with a single final void of approximately 680ha in the far east of ML1775.

CVM Justification for the proposed amendment

The Project proposes to extend the footprint of the existing Horse Pit at the CVM scheduled to reach the limit of the approved Horse Pit extent during Financial Year (FY) 2025, with some existing site infrastructure potentially being relocated from 2023. If approved, the extension is projected to extend the mine's life from the 2030s to the 2050s, protecting jobs and royalties into the future.

Significant mine engineering design has been undertaken to accommodate for the Project, which will utilise existing CVM infrastructure for coal processing, tailings disposal and rail loadout of product coal, amongst other things. The Project facilitates an opportunity to further contribute to Australia's position as a primary global producer of high-quality coking coal products. The Project will extract otherwise under-utilised resources from an area already disturbed by previous land uses which provides benefits over establishing a mine at a greenfield site. The extension of the mine life at CVM will also see further economic benefits to local and regional communities. Activities associated with the Project are not expected to cause environmental harm to any nearby sensitive receptors such as residential housing and/or local businesses. However, mitigation measures will be implemented to prevent or minimise negative impacts on surrounding environmental values.

Other Matters

The applicant has provided an EIS Trigger Assessment in the 'EA Amendment Supporting Information' (refer Table 2-2 and Table 2-3) in which they have stated that no EIS triggers are relevant to the Project. The applicant has also stated that they anticipate that the ERAs listed on the current EA EPML00562013 will remain the same.

Matters of state environmental significance (MSES⁶) and related matters

Medium Regulated vegetation:

- endangered and of concern regional ecosystems (REs)
- REs that intersect with a watercourse on Vegetation management (VM) watercourse map
- REs that intersect with a wetland on a VM wetland map
- REs that are also essential habitat for endangered and vulnerable species

Medium Connectivity areas

NA. Wetlands: wetland protection areas, high ecological significance wetlands, high ecological value wetlands and waterways

NA. Strategic environmental area

High Protected wildlife habitat:

- endangered and vulnerable protected flora
- Three types of koala habitat: bushland koala habitat, medium value rehabilitation habitat and high value rehabilitation habitat (SEQ)
- habitat for animal that is endangered, vulnerable or special least concern

NA. Protected areas part of State Forest under the Forestry Act 1959

NA. Highly protected marine park zones

NA. Fish habitat areas

NA. Watercourse providing for fish passage

NA. Marine plants

NA. Legally secured offset areas

Notes:

The Project is likely to have a significant residual impact on matters of state environmental significance (MSES) on 4 key areas:

1. Regulated vegetation – 23.4ha
2. Connectivity – 84.19ha
3. King bluegrass – 23.4ha
4. Ornamental snake – 167.84ha

Regulated Vegetation: The project area has identified 31.44ha of 'Of Concern' RE 11.8.11 which is king bluegrass (*Dichanthium sericeum*) with 23.4ha proposed to have a significant residual impact.

Connectivity Areas: The project has identified 84.19ha of connectivity area which was ground-truthed by the applicant as remnant REs. This comprises of RE 11.8.11 and 11.7.1 The Terrestrial Ecology Report identified 112.4ha of remnant vegetation.

Note: Where there is reference throughout this report to the applicant ground-truthing data, this will be addressed with the Queensland Herbarium while awaiting a response to the Information request to

Other

High Endangered, vulnerable and special least concern species (NC Act)⁷

Low Environmentally sensitive areas A, B and C

NA. Vegetation clearing

Medium Terrestrial ecology

NA. Groundwater-dependent ecosystems

Notes:

According to the Queensland Government ESA – Mining Activities mapping tool, the proposed amendment will impact on approximately 60.52ha of RE 11.7.1 which has a biodiversity status of 'Of Concern' so is a Category B Environmentally Sensitive Area, however under the Vegetation Management Act has a class of 'Least Concern' making it not a prescribed environmental matter under the *Environmental Offsets Act 2014*.

According to the Terrestrial Ecology Assessment provided with the application, the disturbance footprint was ground-truthed to confirm the presence of the following endangered REs:

- Endangered HVR RE 11.3.1: ~0.09ha
- Endangered regrowth RE 11.4.8: ~0.14ha
- Endangered regrowth RE 11.4.9: ~497.88ha

The listed ESAs are not categorised as MSES areas and therefore the applicant does not anticipate that an environmental offset is required.

Matters of national environmental significance (MNES)

High Listed threatened species and ecological communities under the EPBC Act

NA. Great Barrier Reef Marine Park

NA. Wetlands of International importance

NA. Migratory species (international agreements)

NA. World Heritage Properties

NA. National Heritage places

NA. Commonwealth marine areas

NA. Nuclear actions

High A water resource in relation to CSG and large coal mining developments (IESC)

Notes:

There are three EPBC Act listed threatened species (one flora species and two fauna species) which have been identified in the disturbance footprint of the project as known or likely to occur within the area, this includes:

- King bluegrass: 23.4ha;

⁶ For definitions of MSES refer to schedule 2 of the Environmental Offsets Regulation 2014.

⁷ NC Act – *Nature Conservation Act 1992*

ensure this has been formally assessed through the herbarium and there is evidence of the approval.

Protected Wildlife Habitat: The application states that there are a number of areas relating to six species with protected wildlife habitat which will be impacted by the project. This includes the following:

- Known to occur:
 - King bluegrass (vulnerable): 23.4ha;
 - Ornamental snake (vulnerable): 167.84ha (preferred habitat);
 - Squatter Pigeon (vulnerable): 54.82ha (preferred habitat) and 28.71ha (suitable)
- Likely/potential to occur:
 - Common death adder (vulnerable): 80.47ha;
 - Australian painted snipe (vulnerable): 1.8ha;
 - Short-beaked echidna (special least concern): 595.03ha

The applicant has indicated that there will likely be a significant residual impact on king bluegrass and ornamental snake habitat, however this is also a EPBC Act listed threatened species so will be managed under the EPBC Act assessment process. Furthermore, the applicant has indicated a significant residual impact to squatter pigeon and the Australian painted snipe are not anticipated, and as this constitutes an MNES impact it will be assessed under the EPBC Act.

Coastal issues

- | | |
|-----|--|
| NA. | Coastal hazard (erosion, storm tide inundation) |
| NA. | Structures (jetties, pontoons, seawalls) |
| NA. | Reclamation |
| NA. | Port development |
| NA. | Dredging and spoil disposal |
| NA. | Quarry material extraction from tidal water |
| NA. | Artificial waterways (canal estates, lakes) |
| NA. | Impacts on marine systems |
| NA. | Coastal resources (natural and physical features such as beaches, dunes, wetlands; processes and landforms; vegetation, wildlife etc.) |
| NA. | Public access to coastal and marine resources |

Notes:

None of the above matters are identified to be located within or in the immediate vicinity of the proposed Horse Pit Extension. Therefore, coastal issues are unlikely.

- Ornamental snake: 167.84ha (preferred habitat); and
- Squatter pigeon: 54.82ha (preferred habitat) and 28.71 (suitable habitat).

The Australian painted snipe (1.8ha) also has the potential to occur with intermittent foraging habitat recorded.

It is anticipated that there will be a significant residual impact to MNES areas (king bluegrass and ornamental snake). The CVM proposed amendment has already been submitted to the Federal Government Environment Minister or a delegate for formal assessment and approval. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Tenure issues

- | | |
|-----|--|
| NA. | Protected areas |
| NA. | Native title interests |
| NA. | Offshore jurisdiction |
| NA. | Commonwealth jurisdiction |
| NA. | Interstate jurisdiction |
| NA. | Legally secured offset area |
| NA. | Occupancy of unallocated state land under tidal waters |

Notes:

The Horse Pit Extension will require the grant of two additional surface area rights by the Department of Resources. An application has been lodged by the applicant to the Department of Resources and therefore the public notification of the Horse Pit Extension will be conducted as a coordinated approach by the Department of Resources.

The joint holders of EA EPML00562013 currently hold the underlying tenures. Therefore it is not anticipated that tenure issues are likely.

Resource allocation

- Low Mining
- NA. Gas / Petroleum
- NA. Quarry material allocation under the CPM Act (quarry material extraction from below tidal water)
- Low Water allocation
- NA. Occupancy of fish habitat area (resource allocation under the Fisheries Act)
- NA. Commercial opportunities on national parks and marine parks
- Low Allocation of public resources (e.g. physical and natural resources environmental capacity)

Notes:

The proposed amendment is not anticipated to significantly increase the intensity of the relevant activity beyond what is currently approved with no change in the rate of extraction. The application states that Caval Ridge mine will continue to produce up to 15 million tonnes per annum (Mtpa) of ROM coal. The EA does not specify a ROM or production rate. Caval Ridge Mine also processes ROM coal from Peak Downs onsite. This information is able to be sourced via an information request including the following:

- Production limits from both Caval Ridge Mine and Peak Downs Mine;
- The production of waste from each site as well as the volume of waste from Caval Ridge versus Peak Downs Mine that is disposed of at Caval Ridge.

There are no changes to the approved mining methods proposed and material characteristics of coal and overburden remain unchanged. The proposed amendment will result in an additional 910.7ha of disturbance to the current disturbance footprint of 6,306ha (current ERC decision) resulting in an approximate 14% increase in surface area disturbance. Additional information regarding the necessity of this amount of proposed disturbance particularly around the proposed out of pit dump can be sought in the information request.

Water issues

- Low Water quality
- Low Discharges
- Low Groundwater
- Low Surface water
- Low Hydrology
- NA. Diversions
- Low Cumulative impacts (e.g. groundwater)
- Low Impacts on stream flows (geomorphological)
- NA. Impacts on bank stability
- Unknown Waterways management
- NA. Impacts on freshwater systems
- NA. Regulated structures (e.g. dams)
- NA. Cumulative management areas under the *Water Act 2000*

Notes:

The applicant has stated that there is no anticipated increase in the demand for water and the current mine water system will maximise water re-use for dust suppression and coal processing. Additional water management infrastructure is being proposed as well as the relocation of dams currently located within the project site. However, it is not anticipated that there will be an increase in the need for mine affected water (MAW) dams. Any potential releases to surface waters are to comply with the conditions of the existing EA. There are no additional discharge points proposed and no change in release quality or quantity limits to surface waters.

Air issues

- Low Air shed management
- High Pollution
- High Health
- High Nuisance
- NA. Ecological impacts
- NA. Odour

Notes:

The proposed amendment triggered the requirement for public notification based on the risk associated with the project's air quality impacts. According to the application, the frequency of unmitigated dust emission exceedances is anticipated to increase as well as the predicted monthly average dust deposition over the life of mine at sensitive receptors located at Site 6 (Long Pocked Rd) and Site 8 (Moranbah Airport) as shown below:

- Site 6 (Long Pocket Rd west, DP6): An increase from 129 mg/m²/day to and above-objective level of 140 mg/m²/month which represents as 8% increase.
- Site 8 (Moranbah Airport, DP8): An increase from 115 mg/m²/day to and above-objective level of 138 mg/m²/month which represents as 20% increase.

Furthermore there is anticipated to be a significant increase in the operational risk for PM10 concentrations for most sensitive receptor locations located at Site 2 (Surrogate for Moranbah Township);

There are four minor ephemeral drainage lines within the proposed project site. The applicant has stated that these drainage lines do not require a diversion and therefore will be mined through as mining progresses. According to section 5(3) of the *Water Act 2000*, a watercourse does not include a drainage feature.

The proposed construction of the Horse Pit North levee and the Horse Pit West levee is modelled to achieve flood immunity of up to and including a 0.1% Annual Exceedance Probability (AEP) event. The construction of the levees and the Horse Pit Crossing for the haul trucks will occur during the dry season to minimise soil disturbance to the adjacent waterways and will be in line with the current Erosion and Sediment Control Plan.

Furthermore, in terms of surface water run-off, the applicant has stated that the proposed changes “are unlikely to cause changes to the flow regime that may result in impacts to downstream users or the environment”

Site 6 (Long Pocket Road) and Site 8 (Moranbah Airport) as shown below:

- Site 2 (Long Pocket Rd East, Surrogate for Moranbah Township, DP2): An increase from 50 $\mu\text{g}/\text{m}^3$ to 57 $\mu\text{g}/\text{m}^3$ which is a 14% increase above the objective listed in condition B6 of the EA;
- Site 6 (Long Pocket Rd west, DP6): An increase from 50 $\mu\text{g}/\text{m}^3$ to 52 $\mu\text{g}/\text{m}^3$ which is a 4% increase;
- Site 8 (Moranbah Airport, DP8): An increase from 65 $\mu\text{g}/\text{m}^3$ to 89 $\mu\text{g}/\text{m}^3$ which is a 37% increase. The difference from the objective listed in condition B6 of the EA is a 78% increase.

The application documents have not specified the revised predictions based on proposed mitigation and management measures. The assessing officer is unable to identify if the implementation measures will be sufficient to demonstrate, as per the existing EA condition, that there will not be a substantial change in the concentration of PM10 at sensitive or commercial places once all reasonable and practical measures have been taken or that mitigation and management measures are predicted to reduce PM10 concentrations to a level compliant with the Environmental Protection (Air) Policy 2019, when measured at sensitive or commercial places.

There have been ongoing discussions with the applicant who is aware that further information will be sought as part of the information request to address the concerns regarding the justification for and suitability of mitigation measures and strategies to effectively be able to meet the current conditions of the EA and levels detailed in Environmental Protection (Air) Policy 2019.

Noise and vibration issues

Low	Community noise
Low	Transportation noise
Low	Industrial noise
Low	Ground vibration
Low	Airblast overpressure
Low	Low frequency
NA.	Marine noise (underwater)
NA.	Ecological impacts

Notes:

Extension of operations northward will bring mining activities closer in proximity to the town of Moranbah and the Moranbah Airport.

Noise assessment reports identified that there were two sensitive receptors that would be impacted by the proposed amendment where the applicant would not be able to comply with the noise limits specified in the

Waste issues

NA.	Solid waste
NA.	Liquid waste
NA.	Gaseous waste
NA.	Dredge spoil disposal
NA.	Energy
NA.	Best practice environmental management
NA.	Waste water
High	Rock waste dumps
Low	Non-acid forming and potentially acid forming material

Notes:

The Horse Pit Extension will increase the quantity of waste rock and coal rejects generated. The additional waste rock will be disposed of within the in-pit waste rock dump and the proposed out of pit dump.

CVM EA EPML00562013, under standard mitigation measures circumstances. It was predicted that in 2050 under adverse weather conditions, sensitive receptor R2 (881 Long Pocket Rd) and R7 (Skyville) would exceed the noise limits by 2dB and 1dB respectively. However, the application states that additional mitigation measures will be implemented to reduce noise levels at these sensitive receptors and will ensure compliance with the EA conditions.

The additional noise mitigation and management strategies are deemed appropriate to reduce the noise impacts for sensitive receptors and ensure the applicant complies with current conditions of the EA. These strategies include:

- The progressive replacement of standard steel rollers with relatively quieter polymer rollers which is anticipated to result in a decrease in noise emissions by 5dB; and
- The installation of noise suppression kits on dozers working on the proposed out of pit dump;
- Design of the out of pit dump and operation of dozers on the out of pit dump.

The applicant's Noise and Vibration Impact Assessment stated that the Horse Pit extension is anticipated to comply with the current EA conditions regarding blasting or vibration impacts and therefore the current mitigation measures and management strategies will continue to be implemented.

However, it is important to note that the Noise and Vibration Impact Assessment did not consider impacts to the Moranbah Airport which the applicant does not consider as a sensitive or commercial receptor. This will be addressed in the information request.

Land issues

High	Land disturbance
Low	Contaminated land
NA.	Acid sulfate soils
Low	Erosion/stability
NA.	Subsidence
Low	Landscape
Unknown	Effects on hydrology (surface and underground)
Low	Sustainable use
Low	Land use history and compatibility
Low	Areas of regional interest ⁸
NA.	Compliance with planning schemes
High	Rehabilitation and subsequent use
NA.	Native title rights
NA.	Rehabilitation issues (for existing activities)
Low	Non-acid forming and potentially acid forming material

The applicant has stated that there is limited potential for acid mine drainage from the project. The geological environment and geochemical characteristics are proposed to be consistent with that of the existing Horse Pit. Therefore current mitigation and management strategies of waste product are not expected to change.

The necessity of an additional out of pit dump as opposed to increasing the backfilling of the existing pit is unclear. As previously mentioned, this will be addressed in the information request as to an options analysis.

Cultural and heritage issues

NA.	Aboriginal and Torres Strait Islander cultural sites
NA.	European cultural heritage significance (historic sites, buildings and locations)
NA.	Queensland heritage place (<i>Queensland Heritage Act 1992</i>)
NA.	Designated landscape area (<i>Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987</i>)
NA.	Native title rights

Notes:

None of the above matters are identified as being located within or in the immediate vicinity of the proposed Horse Pit Extension area. Therefore, there are likely to be no cultural and heritage issues.

⁸ <https://planning.dsdmip.qld.gov.au/planning/regional-planning-interests-act/areas-of-regional-interest>

High Final voids
High Progressive rehabilitation and closure plan

Notes:

An additional 910.71ha of disturbance is proposed to the current disturbance footprint of 6,306ha (as per the current ERC decision) resulting in an approximate 14% increase in surface area disturbance.

The proposed amendment has stated that a final void of 680ha will remain as the final landform design. The application provides conflicting information and it is not clear whether this final void will be able to sustain the stated post-mining land use of a useable water storage or biologically viable water resource or if the final void will result in the stated non-use management area (NUMA). If the void is left as a NUMA, this would result in up to 680ha of land lost as a future productive resource.

The assessing officer is not satisfied that there is currently sufficient information justifying the appropriateness of the final void. Further information will be sought during the information request as to an options analysis for the void outcomes and the ability for rehabilitation activities to occur in the voids proposed final location (close to the tenure boundaries of ML1775).

The Caval Ridge Mine progressive rehabilitation and closure plan is due to be submitted on 1 December 2022. This date may conflict with the current EA amendment assessment.

Impacts on surrounds and transport

Low Transportation (air, rail, road, port, shipping)
NA. Visual impacts
Medium Compatibility with surrounding uses, activities and land users
NA. Adjacent landholders
Medium Amenity
Medium Community & landholder views
NA. Lighting

Notes:

The proposed amendment will extend the current Caval Ridge Mine by approximately 30 years ensuring jobs for the local communities and utilising existing roads and transportation requirements. Caval Ridge Mine is already located in close proximity to the town of Moranbah and the Moranbah airport with the proposed extension bringing the mine even closer.

It is uncertain at this point whether there will be any issues of the proposed project on the public safety (or perception of public safety) of air travel particularly in regard to the closer proximity of the Horse Pit to the airport and consequently the impacts from air quality, lighting impacts and the reduction in land availability. These potential issues will be addressed in the information request to ensure public safety.

Social issues

Low Accommodation
Low Transport of workers
NA. Fly-in/fly-out (*Strong and Sustainable Resource Communities Act 2017*)
NA. Drive-in/drive-out (*Strong and Sustainable Resource Communities Act 2017*)
NA. Displacement of use
Medium Public safety
NA. Politics/policy
Medium Compatibility with surrounding uses, activities and land users

Notes:

The proposed Horse Pit Extension will ensure the current workforce of employees, contractors and local businesses reliant on the operation of the Caval Ridge Mine continue to have work available for an additional ~30 years.

It is not anticipated that the extension of the life of mine at Caval Ridge will significantly change from the current workforce.

It is uncertain at this point whether the currently proposed final design of the mine will raise further community concern regarding public safety, particularly as the proposed highwall would be located in closer proximity to the Peak Downs

highway and Moranbah Access Road, furthermore with the proximity of the mine to the town of Moranbah. These potential issues will be addressed in the information request to ensure public safety.

Published on DESI Disclosure Log
RTI Act 2009

PART B – TRIGGER CRITERIA

An EIS will be required if any of the following trigger criteria are met. If no criteria are triggered, this does not provide an exemption from having to prepare an EIS if the administering authority for the department considers that there may be a significant environmental impact, or there is a high level of uncertainty about the possible impacts, or there is a high level of public interest in the proposal.

For each question, indicate whether the answer is ‘yes’ or ‘no’:

Criteria	Yes	No
For greenfield (new) mine proposals (sections 70 or 143 of the EP Act)		
1. Would the application involve the removal of two million tonnes per year or more of run-of-mine (ROM) ⁹ ore or coal?	☐	☒
2. Would the application involve the removal of one million tonnes per year or more of run-of-mine (ROM) ore or coal on or under a floodplain ¹⁰ or in a coastal hazard area ¹¹ ?	☐	☒
3. Would the application involve the introduction of a novel or unproven resource extraction process, technology or activity ¹² ?	☐	☒
For proposals to amend/alter an existing mine (sections 143 and 228 of the EP Act)		
4. For mines already removing 2 – 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 100% or 5 million tonnes per year (whichever is the lesser)?	☐	☒
5. For mines already removing over 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 50% or 10 million tonnes per year (whichever is the lesser)?	☐	☒
6. For mines already removing more than 20 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 25%?	☐	☒
7. Would the application involve an extension into and significant impact on a Category A or B environmentally sensitive area, which is not already authorised by the State?	☒	☐
8. Would the application involve a substantial change in mining operations – such as from underground to open cut, or (for underground mining) a change in operations from one causing little subsidence to one likely to cause substantial subsidence?	☐	☒
9. Would the application introduce a novel or unproven resource removal process, technology or activity?	☐	☒
For petroleum and gas activities (sections 70, 143 and 228 of the EP Act)		

⁹ ROM ore or coal means the material excavated but prior to washing or chemical concentration. It does not include overburden.

¹⁰ The *Water Act 2000* defines a floodplain as an area of reasonably flat land adjacent to a watercourse that— (a) is covered from time to time by floodwater overflowing from the watercourse; and (b) does not, other than in an upper valley reach, confine floodwater to generally follow the path of the watercourse; and (c) has finer sediment deposits than the sediment deposits of any bench, bar or in-stream island in the watercourse. See also the Queensland Floodplain Assessment Overlay at the *Wetland Info* section of the department's website at <https://wetlandinfo.des.qld.gov.au/wetlands/>.

¹¹ A coastal hazard area is an area vulnerable to coastal hazards, referred to as coastal erosion or storm tide inundation (as per the departmental coastal hazard area mapping). Maps of these areas are accessible at http://www.des.qld.gov.au/coastal/management/coastal_plan_maps.php and <http://qldspatial.information.qld.gov.au/catalogue/custom/index.page>.

¹² For example: underground coal gasification; in-seam coal slurring; a new method of ore concentration; but this will be decided on a case-by-case basis and this trigger is not intended to discourage innovation.

10. Would the application involve a total disturbance area of greater than 2000 hectares at any one time during the life of the proposed project? This includes areas occupied by well pads (single or multi-directional), access tracks and roads, water storages, and process plants?	☐	☒
11. Would the application involve the construction of a high pressure pipeline over a distance of 300 kilometre or greater?	☐	☒
12. Would the application involve the construction of a liquefied natural gas plant?	☐	☒
General considerations		
<p><i>Where needed, make comments on the rating of the application against the trigger criteria.</i></p> <p>According to the Queensland Government ESA – Mining Activities mapping tool, the proposed project is anticipated to impact Category B ESAs. However, this was ground-truthed by the applicant and the regrowth vegetation present in this area does not meet the definitions under the <i>Offsets Act 2014</i> and therefore offsets will not be required.</p> <p>The proposed amendment does not relate to a new greenfield mine proposal or to petroleum and gas activities, therefore these triggers are not applicable. The Caval Ridge Mine already removes over 10 million tonnes of ROM ore or coal and the current application does not increase the current annual ROM or production rate by more than 50% or 10 million tonnes per year. Therefore, the application to amend EA EPML00562013 does not trigger any of the above criteria for an amendment to an existing mine.</p>		

PART C – STANDARD CRITERIA

The standard criteria have to be considered in making the EIS decision. Provide comments on the standard criteria as defined under schedule 4 of the EP Act (where relevant):

Standard criteria, EP Act, schedule 4, definitions (current as at 1 January 2018)¹³:

Standard criteria	Comment
Standard criteria means –	
<p>(a) the following principles of environmental policy as set out in the Intergovernmental Agreement on the Environment—</p> <ul style="list-style-type: none"> (i) the precautionary principle; (ii) intergenerational equity; (iii) conservation of biological diversity and ecological integrity; and 	<p>The assessing officer has considered the precautionary principle, intergenerational equity and conservation of biological diversity and ecological integrity.</p> <p>The assessing officer is satisfied that the proposed amendment will not introduce any novel or untested methodologies. Further, any threats of serious or irreversible environmental harm are able to be evaluated in the assessment of this application and indicated in the application to be able to be subsequently managed by the applicant.</p> <p>The assessing officer is currently not satisfied that the proposed amendment will not deleteriously affect the health, diversity, and productivity of the environment for future generations. The amendment lacks details regarding:</p> <ul style="list-style-type: none"> • The applicant's ability to appropriately manage and mitigate air quality emissions; • Sufficient justification as to the necessity of an out of pit dump instead of backfilling the current Horse Pit; • Sufficient justification as to the extent of the final void; • The ability of the final void to sustain a post-mining use; and • If the final void is to remain as a non-use management area, the applicant has not provided additional studies and options to reduce the extent and consequently ensure more land is available for the use by future generations. <p>Although the assessing officer is not satisfied with the aforementioned aspects, these concerns are able to be sought via an information request.</p> <p>The assessing officer is satisfied that the proposed amendment will not compromise biodiversity or ecological integrity. The majority of the land, the subject of the amendment application, has historically been cleared of vegetation for agricultural purposes and includes only minimal areas of remnant vegetation. Furthermore, significant residual impacts</p>

¹³ Check standard criteria against latest version of the EP Act and amend if required
<https://www.legislation.qld.gov.au/view/html/inforce/current/act-1994-062>

	to MNES and MSES areas will require offsets prior to any disturbance to these areas.
(b) any Commonwealth or State government plans, standards, agreements or requirements about environmental protection or ecologically sustainable development; and	The assessing officer has considered the <i>Environmental Protection Act 1994</i> (EP Act), its subordinate legislation, the <i>Environmental Protection Regulation 2019</i> (EP Reg) and additional supporting policies.
(d) any relevant environmental impact study, assessment or report ; and	The assessing officer has considered all technical assessments and supporting information provided with the application.
(e) the character, resilience and values of the receiving environment; and	The assessing officer has considered the character, resilience and values of the receiving environment based on the information provided by the applicant within the application form and supporting information. Further, aside for air quality and the final void landform design (which are able to be addressed in the information request), the application's proposed management actions to maintain the character, resilience and values of the receiving environment, are likely to be sufficient, when combined with appropriate conditioning in EA EPML00562013.
(f) all submissions made by the applicant and submitters; and	The assessing officer has considered all application material submitted by the applicant. The application has triggered public notification under section 230 of the EP Act and therefor submissions made against the amendment application can be considered during the decision stage.
(g) the best practice environmental management for activities under any relevant instrument, or proposed instrument, as follows— <ul style="list-style-type: none"> (i) an environmental authority; (ii) a transitional environmental program; (iii) an environmental protection order; (iv) a disposal permit; (v) a development approval; and 	The assessing officer has considered the best practice environmental management for the proposed activities. The appropriate regulatory instrument is the EA EPML00562013, and management plans required by the EA. There are no relevant transitional environmental programs, environmental protection order, disposal permit or development approval relevant to the EA or this application.
(h) the financial implications of the requirements under an instrument, or proposed instrument, mentioned in paragraph (g) as they would relate to the type of activity or industry carried out, or proposed to be carried out, under the instrument; and	The assessing officer has considered the financial implications. It can be reasonably expected that the applicant, who initiated the amendment application, has considered any additional financial costs resulting from the extension to the project, and any resulting cost of continuing compliance with changes to the EA conditions. Therefore, any financial implications are considered to be within the applicant's means to pay.
(i) the public interest ; and	The assessing officer has considered the public interest of the proposed amendment. As the project is located in close proximity to multiple sensitive receptors including the town of Moranbah and the Moranbah Airport, there is potential for public interest. The proposed amendment is subject to public notification in which time, the public will have the opportunity to make submissions.

	Additionally, with regards to all decisions, human rights have been considered at this stage of the assessment process. There are no reasonably foreseeable limitations for human rights under the <i>Human Rights Act 2019</i> for the assessment of the requirement for an EIS.
(j) any relevant site management plan ; and	There are no relevant site management plans for the land that is subject of this application.
(k) any relevant integrated environmental management system or proposed integrated environmental management system; and	There is no relevant integrated environment management system or proposed integrated environmental management system applicable to the EA or this application.
(l) any other matter prescribed under a regulation.	There are no further matters prescribed under regulation (i.e. the EP Reg.) for consideration.
General considerations	
<p><i>Where needed, make comments on the rating of the application against the standard criteria.</i></p> <p>With consideration of the above comments, the proposed amendment application is reasonably expected to be compliant with the standard criteria as defined by Schedule 4 of the EP Act.</p>	

Coordinated assessment committee (CAC) report on the requirement for an environmental impact statement (EIS)

This internal report is for recommendations to the Department of Environment and Science CAC on whether an EIS is required for a project under sections 70, 73A, 143 and 228 of the Environmental Protection Act 1994 (EP Act).

When this report applies

The report format should be used for all resource applications meeting the requirements for a decision by CAC on whether an EIS is required under sections 70, 73C, 143 and 228 of the EP Act.

Specifically, this report should be used for:

- all site-specific resource applications for an environmental authority (EA) (s143 EP Act)
- applications that are major amendments to an EA (s228 EP Act)
- applications for voluntary preparation of an EIS (s70 EP Act)
- applications for: decisions on whether an EIS would be required for EA applications under s73A(1)(a) of the EP Act; and, if relevant, applications to prepare an EIS under s73A(1)(b) of the EP Act, if the chief executive decides an EIS would not be required for an EA application.

Note: this report is **not** for projects that have completed an EIS under the EP Act. It also does **not** apply to 'coordinated projects' under the *State Development and Public Works Organisation Act 1971*.

How to use this report format

This report should be prepared by the nominated assessment officer and should include a recommendation based on an assessment of:

- Part A (department interests)
- Part B (trigger criteria)
- Part C (standard criteria) of this CAC report.

Applications for major EA amendments should attach the assessment level decision (ALD decision) and supporting documentation, such as maps, to this CAC report. The CAC report must be approved and signed by the manager.

The completed CAC report should then be forwarded to Environmental Impact Assessment Team at eis@des.qld.gov.au, carbon copy (cc) to Pauline.Gregory@des.qld.gov.au and Chris.Loveday@des.qld.gov.au.

Applicant and project details

Project name	Caval Ridge Horse Pit Extension
Applicant name ¹	BHP Coal Pty Ltd
Project type	Mining black coal
Tenure details	ML70403; ML1775; ML70462
Project location	Caval Ridge Mine is located 7km south of Moranbah. The proposed Horse Pit Extension located towards the north west of the site.

Administrative details

Application type	Major amendment of a site-specific environmental authority.
Environmental authority no. (if relevant)	EPML00562013
eDOCS reference	101/0000190
Department business centre	Business Centre Coal
EIS decision due (max 3 bd after CAC report) ²	11 April 2022 (*20BD from payment of major fee and 10BD extension)
Information request due (section 140 EP Act)	11 April 2022 (*20BD from payment of major fee and 10BD extension)

¹ The 'applicant' is the persons, or registered legal entity (not a business trading name) intending to carry out the activity and in whose name the applicable permits or licences are to be issued.

² The EIS decision is due three business days (3 bd) after the CAC report is provided to CAC.

Recommendation³

After completing Parts A, B and C of this report, mark which of the following applies:

(a) EIS is required.....☐

(b) No EIS is required.....☒

Statement of reasons:

The assessing officer recommends that an EIS is not required for the major amendment regarding environmental authority EPML00562013. The major amendment application relates to the extension of the existing Horse Pit to the north east of Caval Ridge Mine, located on mining lease (ML) 1775, ML70403 and ML70462. The application, lodged 15 December 2021 by the principal applicant BHP Coal Pty Ltd, has been assessed against the 'EIS criteria for resource projects' (EIS criteria) as per section 3 of the Department's Guideline – 'Criteria for environmental impact statements for resource projects under the environmental Protection Act 1994' (ESR/2016/2167) (EIS Guideline).

The assessing officer has considered the EIS criteria through reference to the application documents, the EIS guideline and the information contained within this report. As a result, the assessing officer has taken into account the following:

- the 'standard criteria' as per Schedule 4 of the *Environmental Protection Act 1994* (EP Act);
- the trigger criteria as per the EIS triggers for proposals to amend/alter an existing mine;
- the relative magnitude of the project with regards to its scale and risk of impacts to environmental values;
- the public interest with regards to the amendment and its impacts;
- any uncertainties with regards to possible impacts;
- any significant issues to be addressed by other Queensland Government or Commonwealth Government authorities;
- the social and economic impacts; and
- any cumulative impacts.

Further, the assessing officer is satisfied that any issues concerning the above can and will be resolved, without the need for an EIS.

Assessing officer: Luisa Taufatofua

Date: 5/04/2022

Delegate (EP Act): Juliana McCosker

Date: 5/04/2022

³ In making this recommendation, the department's guideline *Criteria for environmental impact statements for resource projects under the Environmental Protection Act 1994* (ESR/2016/2167) assists the administering authority to carry out its functions and responsibilities in accordance with the EP Act. This includes empowerment of the right to require an EIS for a resource development project if consideration of the standard criteria (and any other relevant considerations) shows an EIS should be required, irrespective of the triggers in this guideline.

PART A – DES INTERESTS

Additional approval processes required (attach details where necessary):

- ☐ None
- ☐ Other applications received by the department for project
- ☐ A process under the *State Development and Public Works Organisation Act 1971*
- ☒ Commonwealth processes under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- ☐ Other

The applicant has also submitted an application for approval under the EPBC Act which is currently under review. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Special considerations (attach details where necessary):

- ☒ Affects an environmentally sensitive area (Category A, B and/or C⁴)
- ☐ Involves a large number of individual decisions
- ☒ Is likely to generate significant community concern
- ☐ Needs policy change for approval
- ☐ Applicant suitability⁵
- ☐ Involves significant issues with another Queensland Government/Australian Government authority
- ☐ Involves impacts on an existing legally secured offset area under State and/or Commonwealth legislation
- ☐ Another special circumstance which significantly elevates environmental, social or economic risks beyond those usual for this type of project
- ☐ Other

According to the Queensland Government ESA – Mining Activities mapping tool, the proposed project is anticipated to impact Category B ESAs. However, this was ground-truthed by the applicant and the regrowth vegetation present in this area does not meet the definitions under the *Offsets Act* 2014 and therefore offsets will not be required.

The amendment is likely to generate significant community concern due to three primary factors:

1. The proposed Horse Pit Extension will bring mining activities within closer proximity to multiple sensitive receptors, specifically it will be located right next to the Moranbah airport and in close proximity to the town of Moranbah and other surrounding homesteads to the north.
2. Furthermore, the potential for air quality impacts to sensitive receptors, particularly at the Moranbah Airport or town of Moranbah, is anticipated to increase significantly which could have issues to the health and wellbeing of sensitive receptors and the general public accessing these areas.
3. The amendment proposes for a final void of 680ha to remain following the closure of the mine. It is not clear whether this void will be able to sustain a post-mining land use or whether

⁴ Refer to guideline ESR/2016/1985: 'Eligibility criteria and standard conditions for exploration and mineral development projects'

⁵ Refer to guideline ESR/2015/1771: 'Application to be a registered suitable operator'.

it will result in a non-use management area located in close proximity to the Moranbah airport, town of Moranbah and the adjoining highway.

On the other hand, the proposed project is anticipated to have numerous community benefits including the ongoing provision of jobs to those currently employed at Caval Ridge and localised benefits to the town of Moranbah.

Pre-lodgement advice

Provide information on date, who and what advice was given during the pre-lodgement meeting.

20 October 2020: A Technical Workshop 1 was held between DES, BHP (applicant) and SLR (Consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focussed on air quality, noise, land and geochemistry.

- Air quality: No questions from DES.
- Noise and Vibration: DES queried how old the data proposed to be used for cumulative impact assessments was.
- Land: DES queried the depth of topsoil and stated that DES will be looking very closely at topsoil management going forward.
- Geochemistry: No questions from DES.

21 October 2020: A Technical Workshop 2 was held between DES, DAWE and BHP (applicant) and SLR (consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focused on terrestrial ecology, GDEs, Groundwater and Surface Water.

- Terrestrial Ecology: DES had queries around Horse Creek, herbarium mapping and that offset may be required.
- Groundwater: DES had queries around mapping and details of proposed bores.
- GDEs: DES reiterated that it is not DES's role to comment on the methodology of the assessments but to assess the assessment. DES also expressed those reports, documents and technical information would need to be provided prior to DES providing any detailed feedback.
- Surface Water: DES queried any interactions between pit flows and surface water flows to Horse Creek which SLR consulting confirmed there would be no interactions.

19 August 2021: A pre-lodgement meeting was held between DES and BHP to discuss the Caval Ridge Horse Pit Extension Project. At this meeting a site visit was organised to be held on 28 August 2021.

28 August 2021: A site visit was undertaken to Caval Ridge.

Other issues

Provide information on any other issue not covered in this CAC report.

The application was submitted on 15 December 2021 and on 17 January 2022, it was determined that the amendment be a major amendment requiring public notification. The project was deemed to be likely to be a substantial increase in the risk of environmental harm and the risk is the result of a substantial change in the results of the release of a quantity or quality of a contaminant permitted to be released into the environment. This was triggered due to the significant increase in the air quality impacts predicted from the study particularly around dust and PM10 emissions. The air quality technical report provided with the application did not provide sufficient justification that the applicant would be able to reduce the air quality impacts to below the 10% trigger limit. On 18 January 2022 and 10 February 2022, the Department had a meeting with the applicants to discuss the issues

regarding the air quality impacts. The applicant advised that they would be providing updated technical reports to demonstrate how Caval Ridge will be able to reduce the air quality impacts and comply with the conditions of the EA. Such was to be provided following withdrawal of the application and subsequent resubmission. The applicant decided to progress with the application including public notification instead.

Published on DESI Disclosure Log
RTI Act 2009

DES interests

If an impact is indicated, provide information on the level and significance of the impact on the matter

Amendment Description

The applicant proposes to extend an existing northern mine pit, named Horse Pit. This will result in a revised life of mine from 2026 to 2056, adding 30 years to the operation to that of existing approvals. The Horse Pit Extension Project proposes an additional 910.71 ha of disturbance and will include:

- The extension of the Horse Pit (655.65 ha in the north east of ML 1775);
- The addition of an out of pit dump (107.31 ha) in the northwest of ML 70403;
- The relocation of existing infrastructure located within the proposed Horse Pit extension site including the EME Build Pad, blasting compound with two potential relocation options, back access roads, substations, go-lines and powerlines;
- The construction of two additional regulated flood levees to protect the proposed project area from potential flood events (up to 0.1% Annual Exceedance Probability (AEP)).
- The northern (Horse Pit North) levee will be approximately 1.4km in length and bounds a portion of Horse Pit in the north of the proposed pit; and
- The western (Horse Pit West) levee will be approximately 400m in length and located within the south west extent of the proposed out of pit dump.
- The construction of a bridge over Horse Creek and the extension of the haul road to the north west of ML 70403 to access the proposed out of pit dump
- The construction of sediment dams as well as both clean water and MAW diversion drains to manage runoff from the proposed out of pit dump (OOPD);
- The relocation of the Peak Downs Highway dragline crossing; and
- A Post-closure rehabilitated final landform with a single final void of approximately 680ha in the far east of ML1775.

CVM Justification for the proposed amendment

The Project proposes to extend the footprint of the existing Horse Pit at the CVM scheduled to reach the limit of the approved Horse Pit extent during Financial Year (FY) 2025, with some existing site infrastructure potentially being relocated from 2023. If approved, the extension is projected to extend the mine's life from the 2030s to the 2050s, protecting jobs and royalties into the future.

Significant mine engineering design has been undertaken to accommodate for the Project, which will utilise existing CVM infrastructure for coal processing, tailings disposal and rail loadout of product coal, amongst other things. The Project facilitates an opportunity to further contribute to Australia's position as a primary global producer of high-quality coking coal products. The Project will extract otherwise under-utilised resources from an area already disturbed by previous land uses which provides benefits over establishing a mine at a greenfield site. The extension of the mine life at CVM will also see further economic benefits to local and regional communities. Activities associated with the Project are not expected to cause environmental harm to any nearby sensitive receptors such as residential housing and/or local businesses. However, mitigation measures will be implemented to prevent or minimise negative impacts on surrounding environmental values.

Other Matters

The applicant has provided an EIS Trigger Assessment in the 'EA Amendment Supporting Information' (refer Table 2-2 and Table 2-3) in which they have stated that no EIS triggers are relevant to the Project. The applicant has also stated that they anticipate that the ERAs listed on the current EA EPML00562013 will remain the same.

Matters of state environmental significance (MSES⁶) and related matters

Medium Regulated vegetation:

- endangered and of concern regional ecosystems (REs)
- REs that intersect with a watercourse on Vegetation management (VM) watercourse map
- REs that intersect with a wetland on a VM wetland map
- REs that are also essential habitat for endangered and vulnerable species

Medium Connectivity areas

NA. Wetlands: wetland protection areas, high ecological significance wetlands, high ecological value wetlands and waterways

NA. Strategic environmental area

High Protected wildlife habitat:

- endangered and vulnerable protected flora
- Three types of koala habitat: bushland koala habitat, medium value rehabilitation habitat and high value rehabilitation habitat (SEQ)
- habitat for animal that is endangered, vulnerable or special least concern

NA. Protected areas part of State Forest under the Forestry Act 1959

NA. Highly protected marine park zones

NA. Fish habitat areas

NA. Watercourse providing for fish passage

NA. Marine plants

NA. Legally secured offset areas

Notes:

The Project is likely to have a significant residual impact on matters of state environmental significance (MSES) on 4 key areas:

1. Regulated vegetation – 23.4ha
2. Connectivity – 84.19ha
3. King bluegrass – 23.4ha
4. Ornamental snake – 167.84ha

Regulated Vegetation: The project area has identified 31.44ha of 'Of Concern' RE 11.8.11 which is king bluegrass (*Dichanthium sericeum*) with 23.4ha proposed to have a significant residual impact.

Connectivity Areas: The project has identified 84.19ha of connectivity area which was ground-truthed by the applicant as remnant REs. This comprises of RE 11.8.11 and 11.7.1 The Terrestrial Ecology Report identified 112.4ha of remnant vegetation.

Note: Where there is reference throughout this report to the applicant ground-truthing data, this will be addressed with the Queensland Herbarium while awaiting a response to the Information request to

Other

High Endangered, vulnerable and special least concern species (NC Act)⁷

Low Environmentally sensitive areas A, B and C

NA. Vegetation clearing

Medium Terrestrial ecology

NA. Groundwater-dependent ecosystems

Notes:

According to the Queensland Government ESA – Mining Activities mapping tool, the proposed amendment will impact on approximately 60.52ha of RE 11.7.1 which has a biodiversity status of 'Of Concern' so is a Category B Environmentally Sensitive Area, however under the Vegetation Management Act has a class of 'Least Concern' making it not a prescribed environmental matter under the *Environmental Offsets Act 2014*.

According to the Terrestrial Ecology Assessment provided with the application, the disturbance footprint was ground-truthed to confirm the presence of the following endangered REs:

- Endangered HVR RE 11.3.1: ~0.09ha
- Endangered regrowth RE 11.4.8: ~0.14ha
- Endangered regrowth RE 11.4.9: ~497.88ha

The listed ESAs are not categorised as MSES areas and therefore the applicant does not anticipate that an environmental offset is required.

Matters of national environmental significance (MNES)

High Listed threatened species and ecological communities under the EPBC Act

NA. Great Barrier Reef Marine Park

NA. Wetlands of International importance

NA. Migratory species (international agreements)

NA. World Heritage Properties

NA. National Heritage places

NA. Commonwealth marine areas

NA. Nuclear actions

High A water resource in relation to CSG and large coal mining developments (IESC)

Notes:

There are three EPBC Act listed threatened species (one flora species and two fauna species) which have been identified in the disturbance footprint of the project as known or likely to occur within the area, this includes:

- King bluegrass: 23.4ha;

⁶ For definitions of MSES refer to schedule 2 of the Environmental Offsets Regulation 2014.

⁷ NC Act – *Nature Conservation Act 1992*

ensure this has been formally assessed through the herbarium and there is evidence of the approval.

Protected Wildlife Habitat: The application states that there are a number of areas relating to six species with protected wildlife habitat which will be impacted by the project. This includes the following:

- Known to occur:
 - King bluegrass (vulnerable): 23.4ha;
 - Ornamental snake (vulnerable): 167.84ha (preferred habitat);
 - Squatter Pigeon (vulnerable): 54.82ha (preferred habitat) and 28.71ha (suitable)
- Likely/potential to occur:
 - Common death adder (vulnerable): 80.47ha;
 - Australian painted snipe (vulnerable): 1.8ha;
 - Short-beaked echidna (special least concern): 595.03ha

The applicant has indicated that there will likely be a significant residual impact on king bluegrass and ornamental snake habitat, however this is also a EPBC Act listed threatened species so will be managed under the EPBC Act assessment process. Furthermore, the applicant has indicated a significant residual impact to squatter pigeon and the Australian painted snipe are not anticipated, and as this constitutes an MNES impact it will be assessed under the EPBC Act.

Coastal issues

- | | |
|-----|--|
| NA. | Coastal hazard (erosion, storm tide inundation) |
| NA. | Structures (jetties, pontoons, seawalls) |
| NA. | Reclamation |
| NA. | Port development |
| NA. | Dredging and spoil disposal |
| NA. | Quarry material extraction from tidal water |
| NA. | Artificial waterways (canal estates, lakes) |
| NA. | Impacts on marine systems |
| NA. | Coastal resources (natural and physical features such as beaches, dunes, wetlands; processes and landforms; vegetation, wildlife etc.) |
| NA. | Public access to coastal and marine resources |

Notes:

None of the above matters are identified to be located within or in the immediate vicinity of the proposed Horse Pit Extension. Therefore, coastal issues are unlikely.

- Ornamental snake: 167.84ha (preferred habitat); and
- Squatter pigeon: 54.82ha (preferred habitat) and 28.71 (suitable habitat).

The Australian painted snipe (1.8ha) also has the potential to occur with intermittent foraging habitat recorded.

It is anticipated that there will be a significant residual impact to MNES areas (king bluegrass and ornamental snake). The CVM proposed amendment has already been submitted to the Federal Government Environment Minister or a delegate for formal assessment and approval. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Tenure issues

- | | |
|-----|--|
| NA. | Protected areas |
| NA. | Native title interests |
| NA. | Offshore jurisdiction |
| NA. | Commonwealth jurisdiction |
| NA. | Interstate jurisdiction |
| NA. | Legally secured offset area |
| NA. | Occupancy of unallocated state land under tidal waters |

Notes:

The Horse Pit Extension will require the grant of two additional surface area rights by the Department of Resources. An application has been lodged by the applicant to the Department of Resources and therefore the public notification of the Horse Pit Extension will be conducted as a coordinated approach by the Department of Resources.

The joint holders of EA EPML00562013 currently hold the underlying tenures. Therefore it is not anticipated that tenure issues are likely.

Resource allocation

Low	Mining
NA.	Gas / Petroleum
NA.	Quarry material allocation under the CPM Act (quarry material extraction from below tidal water)
Low	Water allocation
NA.	Occupancy of fish habitat area (resource allocation under the Fisheries Act)
NA.	Commercial opportunities on national parks and marine parks
Low	Allocation of public resources (e.g. physical and natural resources environmental capacity)

Notes:

The proposed amendment is not anticipated to significantly increase the intensity of the relevant activity beyond what is currently approved with no change in the rate of extraction. The application states that Caval Ridge mine will continue to produce up to 15 million tonnes per annum (Mtpa) of ROM coal. The EA does not specify a ROM or production rate. Caval Ridge Mine also processes ROM coal from Peak Downs onsite. This information is able to be sourced via an information request including the following:

- Production limits from both Caval Ridge Mine and Peak Downs Mine;
- The production of waste from each site as well as the volume of waste from Caval Ridge versus Peak Downs Mine that is disposed of at Caval Ridge.

There are no changes to the approved mining methods proposed and material characteristics of coal and overburden remain unchanged. The proposed amendment will result in an additional 910.7ha of disturbance to the current disturbance footprint of 6,306ha (current ERC decision) resulting in an approximate 14% increase in surface area disturbance. Additional information regarding the necessity of this amount of proposed disturbance particularly around the proposed out of pit dump can be sought in the information request.

Water issues

Low	Water quality
Low	Discharges
Low	Groundwater
Low	Surface water
Low	Hydrology
NA.	Diversions
Low	Cumulative impacts (e.g. groundwater)
Low	Impacts on stream flows (geomorphological)
NA.	Impacts on bank stability
Unknown	Waterways management
NA.	Impacts on freshwater systems
NA.	Regulated structures (e.g. dams)
NA.	Cumulative management areas under the <i>Water Act 2000</i>

Notes:

The applicant has stated that there is no anticipated increase in the demand for water and the current mine water system will maximise water re-use for dust suppression and coal processing. Additional water management infrastructure is being proposed as well as the relocation of dams currently located within the project site. However, it is not anticipated that there will be an increase in the need for mine affected water (MAW) dams. Any potential releases to surface waters are to comply with the conditions of the existing EA. There are no additional discharge points proposed and no change in release quality or quantity limits to surface waters.

Air issues

Low	Air shed management
High	Pollution
High	Health
High	Nuisance
NA.	Ecological impacts
NA.	Odour

Notes:

The proposed amendment triggered the requirement for public notification based on the risk associated with the project's air quality impacts. According to the application, the frequency of unmitigated dust emission exceedances is anticipated to increase as well as the predicted monthly average dust deposition over the life of mine at sensitive receptors located at Site 6 (Long Pocked Rd) and Site 8 (Moranbah Airport) as shown below:

- Site 6 (Long Pocket Rd west, DP6): An increase from 129 mg/m²/day to and above-objective level of 140 mg/m²/month which represents as 8% increase.
- Site 8 (Moranbah Airport, DP8): An increase from 115 mg/m²/day to and above-objective level of 138 mg/m²/month which represents as 20% increase.

Furthermore there is anticipated to be a significant increase in the operational risk for PM10 concentrations for most sensitive receptor locations located at Site 2 (Surrogate for Moranbah Township);

There are four minor ephemeral drainage lines within the proposed project site. The applicant has stated that these drainage lines do not require a diversion and therefore will be mined through as mining progresses. According to section 5(3) of the *Water Act 2000*, a watercourse does not include a drainage feature.

The proposed construction of the Horse Pit North levee and the Horse Pit West levee is modelled to achieve flood immunity of up to and including a 0.1% Annual Exceedance Probability (AEP) event. The construction of the levees and the Horse Pit Crossing for the haul trucks will occur during the dry season to minimise soil disturbance to the adjacent waterways and will be in line with the current Erosion and Sediment Control Plan.

Furthermore, in terms of surface water run-off, the applicant has stated that the proposed changes “are unlikely to cause changes to the flow regime that may result in impacts to downstream users or the environment”

Site 6 (Long Pocket Road) and Site 8 (Moranbah Airport) as shown below:

- Site 2 (Long Pocket Rd East, Surrogate for Moranbah Township, DP2): An increase from 50 µg/m³ to 57 µg/m³ which is a 14% increase above the objective listed in condition B6 of the EA;
- Site 6 (Long Pocket Rd west, DP6): An increase from 50 µg/m³ to 52 µg/m³ which is a 4% increase;
- Site 8 (Moranbah Airport, DP8): An increase from 65 µg/m³ to 89 µg/m³ which is a 37% increase. The difference from the objective listed in condition B6 of the EA is a 78% increase.

The application documents have not specified the revised predictions based on proposed mitigation and management measures. The assessing officer is unable to identify if the implementation measures will be sufficient to demonstrate, as per the existing EA condition, that there will not be a substantial change in the concentration of PM10 at sensitive or commercial places once all reasonable and practical measures have been taken or that mitigation and management measures are predicted to reduce PM10 concentrations to a level compliant with the Environmental Protection (Air) Policy 2019, when measured at sensitive or commercial places.

There have been ongoing discussions with the applicant who is aware that further information will be sought as part of the information request to address the concerns regarding the justification for and suitability of mitigation measures and strategies to effectively be able to meet the current conditions of the EA and levels detailed in Environmental Protection (Air) Policy 2019.

Noise and vibration issues

Low	Community noise
Low	Transportation noise
Low	Industrial noise
Low	Ground vibration
Low	Airblast overpressure
Low	Low frequency
NA.	Marine noise (underwater)
NA.	Ecological impacts

Notes:

Extension of operations northward will bring mining activities closer in proximity to the town of Moranbah and the Moranbah Airport.

Noise assessment reports identified that there were two sensitive receptors that would be impacted by the proposed amendment where the applicant would not be able to comply with the noise limits specified in the

Waste issues

NA.	Solid waste
NA.	Liquid waste
NA.	Gaseous waste
NA.	Dredge spoil disposal
NA.	Energy
NA.	Best practice environmental management
NA.	Waste water
High	Rock waste dumps
Low	Non-acid forming and potentially acid forming material

Notes:

The Horse Pit Extension will increase the quantity of waste rock and coal rejects generated. The additional waste rock will be disposed of within the in-pit waste rock dump and the proposed out of pit dump.

CVM EA EPML00562013, under standard mitigation measures circumstances. It was predicted that in 2050 under adverse weather conditions, sensitive receptor R2 (881 Long Pocket Rd) and R7 (Skyville) would exceed the noise limits by 2dB and 1dB respectively. However, the application states that additional mitigation measures will be implemented to reduce noise levels at these sensitive receptors and will ensure compliance with the EA conditions.

The additional noise mitigation and management strategies are deemed appropriate to reduce the noise impacts for sensitive receptors and ensure the applicant complies with current conditions of the EA. These strategies include:

- The progressive replacement of standard steel rollers with relatively quieter polymer rollers which is anticipated to result in a decrease in noise emissions by 5dB; and
- The installation of noise suppression kits on dozers working on the proposed out of pit dump;
- Design of the out of pit dump and operation of dozers on the out of pit dump.

The applicant's Noise and Vibration Impact Assessment stated that the Horse Pit extension is anticipated to comply with the current EA conditions regarding blasting or vibration impacts and therefore the current mitigation measures and management strategies will continue to be implemented.

However, it is important to note that the Noise and Vibration Impact Assessment did not consider impacts to the Moranbah Airport which the applicant does not consider as a sensitive or commercial receptor. This will be addressed in the information request.

Land issues

High	Land disturbance
Low	Contaminated land
NA.	Acid sulfate soils
Low	Erosion/stability
NA.	Subsidence
Low	Landscape
Unknown	Effects on hydrology (surface and underground)
Low	Sustainable use
Low	Land use history and compatibility
Low	Areas of regional interest ⁸
NA.	Compliance with planning schemes
High	Rehabilitation and subsequent use
NA.	Native title rights
NA.	Rehabilitation issues (for existing activities)
Low	Non-acid forming and potentially acid forming material

The applicant has stated that there is limited potential for acid mine drainage from the project. The geological environment and geochemical characteristics are proposed to be consistent with that of the existing Horse Pit. Therefore current mitigation and management strategies of waste product are not expected to change.

The necessity of an additional out of pit dump as opposed to increasing the backfilling of the existing pit is unclear. As previously mentioned, this will be addressed in the information request as to an options analysis.

Cultural and heritage issues

NA.	Aboriginal and Torres Strait Islander cultural sites
NA.	European cultural heritage significance (historic sites, buildings and locations)
NA.	Queensland heritage place (<i>Queensland Heritage Act 1992</i>)
NA.	Designated landscape area (<i>Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987</i>)
NA.	Native title rights

Notes:

None of the above matters are identified as being located within or in the immediate vicinity of the proposed Horse Pit Extension area. Therefore, there are likely to be no cultural and heritage issues.

⁸ <https://planning.dsdmip.qld.gov.au/planning/regional-planning-interests-act/areas-of-regional-interest>

High Final voids
High Progressive rehabilitation and closure plan

Notes:

An additional 910.71ha of disturbance is proposed to the current disturbance footprint of 6,306ha (as per the current ERC decision) resulting in an approximate 14% increase in surface area disturbance.

The proposed amendment has stated that a final void of 680ha will remain as the final landform design. The application provides conflicting information and it is not clear whether this final void will be able to sustain the stated post-mining land use of a useable water storage or biologically viable water resource or if the final void will result in the stated non-use management area (NUMA). If the void is left as a NUMA, this would result in up to 680ha of land lost as a future productive resource.

The assessing officer is not satisfied that there is currently sufficient information justifying the appropriateness of the final void. Further information will be sought during the information request as to an options analysis for the void outcomes and the ability for rehabilitation activities to occur in the voids proposed final location (close to the tenure boundaries of ML1775).

The Caval Ridge Mine progressive rehabilitation and closure plan is due to be submitted on 1 December 2022. This date may conflict with the current EA amendment assessment.

Impacts on surrounds and transport

Low Transportation (air, rail, road, port, shipping)
NA. Visual impacts
Medium Compatibility with surrounding uses, activities and land users
NA. Adjacent landholders
Medium Amenity
Medium Community & landholder views
NA. Lighting

Notes:

The proposed amendment will extend the current Caval Ridge Mine by approximately 30 years ensuring jobs for the local communities and utilising existing roads and transportation requirements. Caval Ridge Mine is already located in close proximity to the town of Moranbah and the Moranbah airport with the proposed extension bringing the mine even closer.

It is uncertain at this point whether there will be any issues of the proposed project on the public safety (or perception of public safety) of air travel particularly in regard to the closer proximity of the Horse Pit to the airport and consequently the impacts from air quality, lighting impacts and the reduction in land availability. These potential issues will be addressed in the information request to ensure public safety.

Social issues

Low Accommodation
Low Transport of workers
NA. Fly-in/fly-out (*Strong and Sustainable Resource Communities Act 2017*)
NA. Drive-in/drive-out (*Strong and Sustainable Resource Communities Act 2017*)
NA. Displacement of use
Medium Public safety
NA. Politics/policy
Medium Compatibility with surrounding uses, activities and land users

Notes:

The proposed Horse Pit Extension will ensure the current workforce of employees, contractors and local businesses reliant on the operation of the Caval Ridge Mine continue to have work available for an additional ~30 years.

It is not anticipated that the extension of the life of mine at Caval Ridge will significantly change from the current workforce.

It is uncertain at this point whether the currently proposed final design of the mine will raise further community concern regarding public safety, particularly as the proposed highwall would be located in closer proximity to the Peak Downs

highway and Moranbah Access Road, furthermore with the proximity of the mine to the town of Moranbah. These potential issues will be addressed in the information request to ensure public safety.

Published on DESI Disclosure Log
RTI Act 2009

PART B – TRIGGER CRITERIA

An EIS will be required if any of the following trigger criteria are met. If no criteria are triggered, this does not provide an exemption from having to prepare an EIS if the administering authority for the department considers that there may be a significant environmental impact, or there is a high level of uncertainty about the possible impacts, or there is a high level of public interest in the proposal.

For each question, indicate whether the answer is ‘yes’ or ‘no’:

Criteria	Yes	No
For greenfield (new) mine proposals (sections 70 or 143 of the EP Act)		
1. Would the application involve the removal of two million tonnes per year or more of run-of-mine (ROM) ⁹ ore or coal?	☐	☒
2. Would the application involve the removal of one million tonnes per year or more of run-of-mine (ROM) ore or coal on or under a floodplain ¹⁰ or in a coastal hazard area ¹¹ ?	☐	☒
3. Would the application involve the introduction of a novel or unproven resource extraction process, technology or activity ¹² ?	☐	☒
For proposals to amend/alter an existing mine (sections 143 and 228 of the EP Act)		
4. For mines already removing 2 – 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 100% or 5 million tonnes per year (whichever is the lesser)?	☐	☒
5. For mines already removing over 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 50% or 10 million tonnes per year (whichever is the lesser)?	☐	☒
6. For mines already removing more than 20 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 25%?	☐	☒
7. Would the application involve an extension into and significant impact on a Category A or B environmentally sensitive area, which is not already authorised by the State?	☒	☐
8. Would the application involve a substantial change in mining operations – such as from underground to open cut, or (for underground mining) a change in operations from one causing little subsidence to one likely to cause substantial subsidence?	☐	☒
9. Would the application introduce a novel or unproven resource removal process, technology or activity?	☐	☒
For petroleum and gas activities (sections 70, 143 and 228 of the EP Act)		

⁹ ROM ore or coal means the material excavated but prior to washing or chemical concentration. It does not include overburden.

¹⁰ The *Water Act 2000* defines a floodplain as an area of reasonably flat land adjacent to a watercourse that— (a) is covered from time to time by floodwater overflowing from the watercourse; and (b) does not, other than in an upper valley reach, confine floodwater to generally follow the path of the watercourse; and (c) has finer sediment deposits than the sediment deposits of any bench, bar or in-stream island in the watercourse. See also the Queensland Floodplain Assessment Overlay at the *Wetland Info* section of the department's website at <https://wetlandinfo.des.qld.gov.au/wetlands/>.

¹¹ A coastal hazard area is an area vulnerable to coastal hazards, referred to as coastal erosion or storm tide inundation (as per the departmental coastal hazard area mapping). Maps of these areas are accessible at http://www.des.qld.gov.au/coastal/management/coastal_plan_maps.php and <http://qldspatial.information.qld.gov.au/catalogue/custom/index.page>.

¹² For example: underground coal gasification; in-seam coal slurring; a new method of ore concentration; but this will be decided on a case-by-case basis and this trigger is not intended to discourage innovation.

10. Would the application involve a total disturbance area of greater than 2000 hectares at any one time during the life of the proposed project? This includes areas occupied by well pads (single or multi-directional), access tracks and roads, water storages, and process plants?	☐	☒
11. Would the application involve the construction of a high pressure pipeline over a distance of 300 kilometre or greater?	☐	☒
12. Would the application involve the construction of a liquefied natural gas plant?	☐	☒
General considerations		
<p><i>Where needed, make comments on the rating of the application against the trigger criteria.</i></p> <p>According to the Queensland Government ESA – Mining Activities mapping tool, the proposed project is anticipated to impact Category B ESAs. However, this was ground-truthed by the applicant and the regrowth vegetation present in this area does not meet the definitions under the <i>Offsets Act 2014</i> and therefore offsets will not be required.</p> <p>The proposed amendment does not relate to a new greenfield mine proposal or to petroleum and gas activities, therefore these triggers are not applicable. The Caval Ridge Mine already removes over 10 million tonnes of ROM ore or coal and the current application does not increase the current annual ROM or production rate by more than 50% or 10 million tonnes per year. Therefore, the application to amend EA EPML00562013 does not trigger any of the above criteria for an amendment to an existing mine.</p>		

PART C – STANDARD CRITERIA

The standard criteria have to be considered in making the EIS decision. Provide comments on the standard criteria as defined under schedule 4 of the EP Act (where relevant):

Standard criteria, EP Act, schedule 4, definitions (current as at 1 January 2018)¹³:

Standard criteria	Comment
Standard criteria means –	
<p>(a) the following principles of environmental policy as set out in the Intergovernmental Agreement on the Environment—</p> <p>(i) the precautionary principle;</p> <p>(ii) intergenerational equity;</p> <p>(iii) conservation of biological diversity and ecological integrity; and</p>	<p>The assessing officer has considered the precautionary principle, intergenerational equity and conservation of biological diversity and ecological integrity.</p> <p>The assessing officer is satisfied that the proposed amendment will not introduce any novel or untested methodologies. Further, any threats of serious or irreversible environmental harm are able to be evaluated in the assessment of this application and indicated in the application to be able to be subsequently managed by the applicant.</p> <p>The assessing officer is currently not satisfied that the proposed amendment will not deleteriously affect the health, diversity, and productivity of the environment for future generations. The amendment lacks details regarding:</p> <ul style="list-style-type: none"> • The applicant's ability to appropriately manage and mitigate air quality emissions; • Sufficient justification as to the necessity of an out of pit dump instead of backfilling the current Horse Pit; • Sufficient justification as to the extent of the final void; • The ability of the final void to sustain a post-mining use; and • If the final void is to remain as a non-use management area, the applicant has not provided additional studies and options to reduce the extent and consequently ensure more land is available for the use by future generations. <p>Although the assessing officer is not satisfied with the aforementioned aspects, these concerns are able to be sought via an information request.</p> <p>The assessing officer is satisfied that the proposed amendment will not compromise biodiversity or ecological integrity. The majority of the land, the subject of the amendment application, has historically been cleared of vegetation for agricultural purposes and includes only minimal areas of remnant vegetation. Furthermore, significant residual impacts</p>

¹³ Check standard criteria against latest version of the EP Act and amend if required
<https://www.legislation.qld.gov.au/view/html/inforce/current/act-1994-062>

	to MNES and MSES areas will require offsets prior to any disturbance to these areas.
(b) any Commonwealth or State government plans, standards, agreements or requirements about environmental protection or ecologically sustainable development; and	The assessing officer has considered the <i>Environmental Protection Act 1994</i> (EP Act), its subordinate legislation, the <i>Environmental Protection Regulation 2019</i> (EP Reg) and additional supporting policies.
(d) any relevant environmental impact study, assessment or report ; and	The assessing officer has considered all technical assessments and supporting information provided with the application.
(e) the character, resilience and values of the receiving environment; and	The assessing officer has considered the character, resilience and values of the receiving environment based on the information provided by the applicant within the application form and supporting information. Further, aside for air quality and the final void landform design (which are able to be addressed in the information request), the application's proposed management actions to maintain the character, resilience and values of the receiving environment, are likely to be sufficient, when combined with appropriate conditioning in EA EPML00562013.
(f) all submissions made by the applicant and submitters; and	The assessing officer has considered all application material submitted by the applicant. The application has triggered public notification under section 230 of the EP Act and therefor submissions made against the amendment application can be considered during the decision stage.
(g) the best practice environmental management for activities under any relevant instrument, or proposed instrument, as follows— <ul style="list-style-type: none"> (i) an environmental authority; (ii) a transitional environmental program; (iii) an environmental protection order; (iv) a disposal permit; (v) a development approval; and 	The assessing officer has considered the best practice environmental management for the proposed activities. The appropriate regulatory instrument is the EA EPML00562013, and management plans required by the EA. There are no relevant transitional environmental programs, environmental protection order, disposal permit or development approval relevant to the EA or this application.
(h) the financial implications of the requirements under an instrument, or proposed instrument, mentioned in paragraph (g) as they would relate to the type of activity or industry carried out, or proposed to be carried out, under the instrument; and	The assessing officer has considered the financial implications. It can be reasonably expected that the applicant, who initiated the amendment application, has considered any additional financial costs resulting from the extension to the project, and any resulting cost of continuing compliance with changes to the EA conditions. Therefore, any financial implications are considered to be within the applicant's means to pay.
(i) the public interest ; and	The assessing officer has considered the public interest of the proposed amendment. As the project is located in close proximity to multiple sensitive receptors including the town of Moranbah and the Moranbah Airport, there is potential for public interest. The proposed amendment is subject to public notification in which time, the public will have the opportunity to make submissions.

	Additionally, with regards to all decisions, human rights have been considered at this stage of the assessment process. There are no reasonably foreseeable limitations for human rights under the <i>Human Rights Act 2019</i> for the assessment of the requirement for an EIS.
(j) any relevant site management plan ; and	There are no relevant site management plans for the land that is subject of this application.
(k) any relevant integrated environmental management system or proposed integrated environmental management system; and	There is no relevant integrated environment management system or proposed integrated environmental management system applicable to the EA or this application.
(l) any other matter prescribed under a regulation.	There are no further matters prescribed under regulation (i.e. the EP Reg.) for consideration.
General considerations	
<p><i>Where needed, make comments on the rating of the application against the standard criteria.</i></p> <p>With consideration of the above comments, the proposed amendment application is reasonably expected to be compliant with the standard criteria as defined by Schedule 4 of the EP Act.</p>	

CAC decisions for 7 April 2022 are as follows:

Caval Ridge Horse Pit Extension – Environmental Authority (EA) Major Amended Application
CAC members – Chris Loveday and Kate Bennink

- On the 15 December 2021 and on 17 January 2022, the department has received a major amendment application of a site-specific EA and it was determined that the amendment be a major amendment requiring public notification
- The application is BHP Coal Pty Ltd
- Caval Ridge Horse Pit Extension is located 7km south of Moranbah. The Horse Pit Extension located towards the NW of the site.
- BHP proposes to extend the footprint of the existing Horse Pit... This will result in a revised life of mine from 2026 to 2056.
- The Horse Pit Extension Project proposes an additional 910.71ha of disturbance
- It is uncertain whether the currently proposed final design of the mine will raise further community concern regarding public safety
- Activities associated with the Project are not expected to cause environmental harm to any nearby sensitive receptors such as residential housing and/or local businesses. However, mitigation measures will be implemented to prevent or minimise negative impacts on surrounding environmental values.
- The extension of the mine life at CVM will also see further economic benefits to local and regional communities
- The Project facilitates an opportunity to further contribute to Australia's position as a primary global producer of high-quality coking coal products.

Consultation

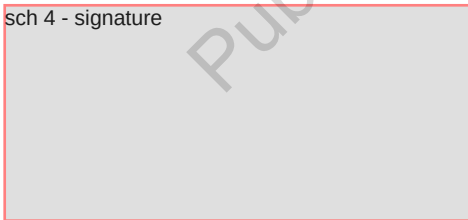
The assessing officer from the Business Centre Coal recommends that an EIS is not required as per Part B – Trigger Criteria.

The application does not trigger the requirements for an EIS under the EP Act for proposals to amend/alter an existing operation.

Decision

An EIS process is **not required** under the EP Act based on consideration of the department's Trigger Criteria, the Standard Criteria and the department's assessment of information provided by the applicant.

sch 4 - signature



Chris Loveday
Director
Technical and Assessment Services
Date: 7 April 2022

Date : 5/04/2022 11:03:49 AM

From : "Luisa Taufatofua"

To : "EIS External Submissions" EIS@des.qld.gov.au

Cc : "Kate Bennink" Kate.Bennink@des.qld.gov.au, "Pauline Gregory" Pauline.Gregory@des.qld.gov.au, "Chris Loveday" Chris.Loveday@des.qld.gov.au, "Juliana Mccosker" Juliana.Mccosker@des.qld.gov.au, "Kathryn Eller" Kathryn.Eller@des.qld.gov.au

Subject : For Decision, CAC Report for Caval Ridge Mine Horse Pit Extension (EPML00562013) - A-EA-AMD-100178679

Attachment : EA Amendment 20220405 CAC Report EPML00562013 BHP Coal Pty Ltd Caval Ridge Mine.pdf;image004.png;

Good morning,

Please find attached for review and decision the CAC report for whether an EIS is required for the major EA (with public notification) amendment application for Caval Ridge Mine Horse Pit Extension, environmental authority EPML00562013.

It is recommended that an EIS is not required.

Please note the information request notice must be issued by 11 April 2022.

Please do not hesitate to contact me should you have any questions or concerns.

Kind regards,



Luisa Taufatofua
Senior Environmental Officer
Business Centre (Coal) | Coal and Central Qld Compliance
Department of Environment and Science

P 07 4987 9342
99 Hospital Road, Emerald QLD 4720
PO Box 3028, Emerald QLD 4720

Coordinated assessment committee (CAC) report on the requirement for an environmental impact statement (EIS)

This internal report is for recommendations to the Department of Environment and Science CAC on whether an EIS is required for a project under sections 70, 73A, 143 and 228 of the Environmental Protection Act 1994 (EP Act).

When this report applies

The report format should be used for all resource applications meeting the requirements for a decision by CAC on whether an EIS is required under sections 70, 73C, 143 and 228 of the EP Act.

Specifically, this report should be used for:

- all site-specific resource applications for an environmental authority (EA) (s143 EP Act)
- applications that are major amendments to an EA (s228 EP Act)
- applications for voluntary preparation of an EIS (s70 EP Act)
- applications for: decisions on whether an EIS would be required for EA applications under s73A(1)(a) of the EP Act; and, if relevant, applications to prepare an EIS under s73A(1)(b) of the EP Act, if the chief executive decides an EIS would not be required for an EA application.

Note: this report is **not** for projects that have completed an EIS under the EP Act. It also does **not** apply to 'coordinated projects' under the *State Development and Public Works Organisation Act 1971*.

How to use this report format

This report should be prepared by the nominated assessment officer and should include a recommendation based on an assessment of:

- Part A (department interests)
- Part B (trigger criteria)
- Part C (standard criteria) of this CAC report.

Applications for major EA amendments should attach the assessment level decision (ALD decision) and supporting documentation, such as maps, to this CAC report. The CAC report must be approved and signed by the manager.

The completed CAC report should then be forwarded to Environmental Impact Assessment Team at eis@des.qld.gov.au, carbon copy (cc) to Pauline.Gregory@des.qld.gov.au and Chris.Loveday@des.qld.gov.au.

Applicant and project details

Project name	Caval Ridge Horse Pit Extension
Applicant name ¹	BHP Coal Pty Ltd
Project type	Mining black coal
Tenure details	ML70403; ML1775; ML70462
Project location	Caval Ridge Mine is located 7km south of Moranbah. The proposed Horse Pit Extension located towards the north west of the site.

Administrative details

Application type	Major amendment of a site-specific environmental authority.
Environmental authority no. (if relevant)	EPML00562013
eDOCS reference	101/0000190
Department business centre	Business Centre Coal
EIS decision due (max 3 bd after CAC report) ²	11 April 2022 (*20BD from payment of major fee and 10BD extension)
Information request due (section 140 EP Act)	11 April 2022 (*20BD from payment of major fee and 10BD extension)

¹ The 'applicant' is the persons, or registered legal entity (not a business trading name) intending to carry out the activity and in whose name the applicable permits or licences are to be issued.

² The EIS decision is due three business days (3 bd) after the CAC report is provided to CAC.

Recommendation³

After completing Parts A, B and C of this report, mark which of the following applies:

(a) EIS is required.....☐

(b) No EIS is required.....☒

Statement of reasons:

The assessing officer recommends that an EIS is not required for the major amendment regarding environmental authority EPML00562013. The major amendment application relates to the extension of the existing Horse Pit to the north east of Caval Ridge Mine, located on mining lease (ML) 1775, ML70403 and ML70462. The application, lodged 15 December 2021 by the principal applicant BHP Coal Pty Ltd, has been assessed against the 'EIS criteria for resource projects' (EIS criteria) as per section 3 of the Department's Guideline – 'Criteria for environmental impact statements for resource projects under the environmental Protection Act 1994' (ESR/2016/2167) (EIS Guideline).

The assessing officer has considered the EIS criteria through reference to the application documents, the EIS guideline and the information contained within this report. As a result, the assessing officer has taken into account the following:

- the 'standard criteria' as per Schedule 4 of the *Environmental Protection Act 1994* (EP Act);
- the trigger criteria as per the EIS triggers for proposals to amend/alter an existing mine;
- the relative magnitude of the project with regards to its scale and risk of impacts to environmental values;
- the public interest with regards to the amendment and its impacts;
- any uncertainties with regards to possible impacts;
- any significant issues to be addressed by other Queensland Government or Commonwealth Government authorities;
- the social and economic impacts; and
- any cumulative impacts.

Further, the assessing officer is satisfied that any issues concerning the above can and will be resolved, without the need for an EIS.

Assessing officer: Luisa Taufatofua

Date: 5/04/2022

Delegate (EP Act): Juliana McCosker

Date: 5/04/2022

³ In making this recommendation, the department's guideline *Criteria for environmental impact statements for resource projects under the Environmental Protection Act 1994* (ESR/2016/2167) assists the administering authority to carry out its functions and responsibilities in accordance with the EP Act. This includes empowerment of the right to require an EIS for a resource development project if consideration of the standard criteria (and any other relevant considerations) shows an EIS should be required, irrespective of the triggers in this guideline.

PART A – DES INTERESTS

Additional approval processes required (attach details where necessary):

- ☐ None
- ☐ Other applications received by the department for project
- ☐ A process under the *State Development and Public Works Organisation Act 1971*
- ☒ Commonwealth processes under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- ☐ Other

The applicant has also submitted an application for approval under the EPBC Act which is currently under review. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Special considerations (attach details where necessary):

- ☒ Affects an environmentally sensitive area (Category A, B and/or C⁴)
- ☐ Involves a large number of individual decisions
- ☒ Is likely to generate significant community concern
- ☐ Needs policy change for approval
- ☐ Applicant suitability⁵
- ☐ Involves significant issues with another Queensland Government/Australian Government authority
- ☐ Involves impacts on an existing legally secured offset area under State and/or Commonwealth legislation
- ☐ Another special circumstance which significantly elevates environmental, social or economic risks beyond those usual for this type of project
- ☐ Other

According to the Queensland Government ESA – Mining Activities mapping tool, the proposed project is anticipated to impact Category B ESAs. However, this was ground-truthed by the applicant and the regrowth vegetation present in this area does not meet the definitions under the *Offsets Act* 2014 and therefore offsets will not be required.

The amendment is likely to generate significant community concern due to three primary factors:

1. The proposed Horse Pit Extension will bring mining activities within closer proximity to multiple sensitive receptors, specifically it will be located right next to the Moranbah airport and in close proximity to the town of Moranbah and other surrounding homesteads to the north.
2. Furthermore, the potential for air quality impacts to sensitive receptors, particularly at the Moranbah Airport or town of Moranbah, is anticipated to increase significantly which could have issues to the health and wellbeing of sensitive receptors and the general public accessing these areas.
3. The amendment proposes for a final void of 680ha to remain following the closure of the mine. It is not clear whether this void will be able to sustain a post-mining land use or whether

⁴ Refer to guideline ESR/2016/1985: 'Eligibility criteria and standard conditions for exploration and mineral development projects'

⁵ Refer to guideline ESR/2015/1771: 'Application to be a registered suitable operator'.

it will result in a non-use management area located in close proximity to the Moranbah airport, town of Moranbah and the adjoining highway.

On the other hand, the proposed project is anticipated to have numerous community benefits including the ongoing provision of jobs to those currently employed at Caval Ridge and localised benefits to the town of Moranbah.

Pre-lodgement advice

Provide information on date, who and what advice was given during the pre-lodgement meeting.

20 October 2020: A Technical Workshop 1 was held between DES, BHP (applicant) and SLR (Consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focussed on air quality, noise, land and geochemistry.

- Air quality: No questions from DES.
- Noise and Vibration: DES queried how old the data proposed to be used for cumulative impact assessments was.
- Land: DES queried the depth of topsoil and stated that DES will be looking very closely at topsoil management going forward.
- Geochemistry: No questions from DES.

21 October 2020: A Technical Workshop 2 was held between DES, DAWE and BHP (applicant) and SLR (consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focused on terrestrial ecology, GDEs, Groundwater and Surface Water.

- Terrestrial Ecology: DES had queries around Horse Creek, herbarium mapping and that offset may be required.
- Groundwater: DES had queries around mapping and details of proposed bores.
- GDEs: DES reiterated that it is not DES's role to comment on the methodology of the assessments but to assess the assessment. DES also expressed those reports, documents and technical information would need to be provided prior to DES providing any detailed feedback.
- Surface Water: DES queried any interactions between pit flows and surface water flows to Horse Creek which SLR consulting confirmed there would be no interactions.

19 August 2021: A pre-lodgement meeting was held between DES and BHP to discuss the Caval Ridge Horse Pit Extension Project. At this meeting a site visit was organised to be held on 28 August 2021.

28 August 2021: A site visit was undertaken to Caval Ridge.

Other issues

Provide information on any other issue not covered in this CAC report.

The application was submitted on 15 December 2021 and on 17 January 2022, it was determined that the amendment be a major amendment requiring public notification. The project was deemed to be likely to be a substantial increase in the risk of environmental harm and the risk is the result of a substantial change in the results of the release of a quantity or quality of a contaminant permitted to be released into the environment. This was triggered due to the significant increase in the air quality impacts predicted from the study particularly around dust and PM10 emissions. The air quality technical report provided with the application did not provide sufficient justification that the applicant would be able to reduce the air quality impacts to below the 10% trigger limit. On 18 January 2022 and 10 February 2022, the Department had a meeting with the applicants to discuss the issues

regarding the air quality impacts. The applicant advised that they would be providing updated technical reports to demonstrate how Caval Ridge will be able to reduce the air quality impacts and comply with the conditions of the EA. Such was to be provided following withdrawal of the application and subsequent resubmission. The applicant decided to progress with the application including public notification instead.

Published on DESI Disclosure Log
RTI Act 2009

DES interests

If an impact is indicated, provide information on the level and significance of the impact on the matter

Amendment Description

The applicant proposes to extend an existing northern mine pit, named Horse Pit. This will result in a revised life of mine from 2026 to 2056, adding 30 years to the operation to that of existing approvals. The Horse Pit Extension Project proposes an additional 910.71 ha of disturbance and will include:

- The extension of the Horse Pit (655.65 ha in the north east of ML 1775);
- The addition of an out of pit dump (107.31 ha) in the northwest of ML 70403;
- The relocation of existing infrastructure located within the proposed Horse Pit extension site including the EME Build Pad, blasting compound with two potential relocation options, back access roads, substations, go-lines and powerlines;
- The construction of two additional regulated flood levees to protect the proposed project area from potential flood events (up to 0.1% Annual Exceedance Probability (AEP)).
- The northern (Horse Pit North) levee will be approximately 1.4km in length and bounds a portion of Horse Pit in the north of the proposed pit; and
- The western (Horse Pit West) levee will be approximately 400m in length and located within the south west extent of the proposed out of pit dump.
- The construction of a bridge over Horse Creek and the extension of the haul road to the north west of ML 70403 to access the proposed out of pit dump
- The construction of sediment dams as well as both clean water and MAW diversion drains to manage runoff from the proposed out of pit dump (OOPD);
- The relocation of the Peak Downs Highway dragline crossing; and
- A Post-closure rehabilitated final landform with a single final void of approximately 680ha in the far east of ML1775.

CVM Justification for the proposed amendment

The Project proposes to extend the footprint of the existing Horse Pit at the CVM scheduled to reach the limit of the approved Horse Pit extent during Financial Year (FY) 2025, with some existing site infrastructure potentially being relocated from 2023. If approved, the extension is projected to extend the mine's life from the 2030s to the 2050s, protecting jobs and royalties into the future.

Significant mine engineering design has been undertaken to accommodate for the Project, which will utilise existing CVM infrastructure for coal processing, tailings disposal and rail loadout of product coal, amongst other things. The Project facilitates an opportunity to further contribute to Australia's position as a primary global producer of high-quality coking coal products. The Project will extract otherwise under-utilised resources from an area already disturbed by previous land uses which provides benefits over establishing a mine at a greenfield site. The extension of the mine life at CVM will also see further economic benefits to local and regional communities. Activities associated with the Project are not expected to cause environmental harm to any nearby sensitive receptors such as residential housing and/or local businesses. However, mitigation measures will be implemented to prevent or minimise negative impacts on surrounding environmental values.

Other Matters

The applicant has provided an EIS Trigger Assessment in the 'EA Amendment Supporting Information' (refer Table 2-2 and Table 2-3) in which they have stated that no EIS triggers are relevant to the Project. The applicant has also stated that they anticipate that the ERAs listed on the current EA EPML00562013 will remain the same.

Matters of state environmental significance (MSES⁶) and related matters

Medium Regulated vegetation:

- endangered and of concern regional ecosystems (REs)
- REs that intersect with a watercourse on Vegetation management (VM) watercourse map
- REs that intersect with a wetland on a VM wetland map
- REs that are also essential habitat for endangered and vulnerable species

Medium Connectivity areas

NA. Wetlands: wetland protection areas, high ecological significance wetlands, high ecological value wetlands and waterways

NA. Strategic environmental area

High Protected wildlife habitat:

- endangered and vulnerable protected flora
- Three types of koala habitat: bushland koala habitat, medium value rehabilitation habitat and high value rehabilitation habitat (SEQ)
- habitat for animal that is endangered, vulnerable or special least concern

NA. Protected areas part of State Forest under the Forestry Act 1959

NA. Highly protected marine park zones

NA. Fish habitat areas

NA. Watercourse providing for fish passage

NA. Marine plants

NA. Legally secured offset areas

Notes:

The Project is likely to have a significant residual impact on matters of state environmental significance (MSES) on 4 key areas:

1. Regulated vegetation – 23.4ha
2. Connectivity – 84.19ha
3. King bluegrass – 23.4ha
4. Ornamental snake – 167.84ha

Regulated Vegetation: The project area has identified 31.44ha of 'Of Concern' RE 11.8.11 which is king bluegrass (*Dichanthium sericeum*) with 23.4ha proposed to have a significant residual impact.

Connectivity Areas: The project has identified 84.19ha of connectivity area which was ground-truthed by the applicant as remnant REs. This comprises of RE 11.8.11 and 11.7.1 The Terrestrial Ecology Report identified 112.4ha of remnant vegetation.

Note: Where there is reference throughout this report to the applicant ground-truthing data, this will be addressed with the Queensland Herbarium while awaiting a response to the Information request to

Other

High Endangered, vulnerable and special least concern species (NC Act)⁷

Low Environmentally sensitive areas A, B and C

NA. Vegetation clearing

Medium Terrestrial ecology

NA. Groundwater-dependent ecosystems

Notes:

According to the Queensland Government ESA – Mining Activities mapping tool, the proposed amendment will impact on approximately 60.52ha of RE 11.7.1 which has a biodiversity status of 'Of Concern' so is a Category B Environmentally Sensitive Area, however under the Vegetation Management Act has a class of 'Least Concern' making it not a prescribed environmental matter under the *Environmental Offsets Act 2014*.

According to the Terrestrial Ecology Assessment provided with the application, the disturbance footprint was ground-truthed to confirm the presence of the following endangered REs:

- Endangered HVR RE 11.3.1: ~0.09ha
- Endangered regrowth RE 11.4.8: ~0.14ha
- Endangered regrowth RE 11.4.9: ~497.88ha

The listed ESAs are not categorised as MSES areas and therefore the applicant does not anticipate that an environmental offset is required.

Matters of national environmental significance (MNES)

High Listed threatened species and ecological communities under the EPBC Act

NA. Great Barrier Reef Marine Park

NA. Wetlands of International importance

NA. Migratory species (international agreements)

NA. World Heritage Properties

NA. National Heritage places

NA. Commonwealth marine areas

NA. Nuclear actions

High A water resource in relation to CSG and large coal mining developments (IESC)

Notes:

There are three EPBC Act listed threatened species (one flora species and two fauna species) which have been identified in the disturbance footprint of the project as known or likely to occur within the area, this includes:

- King bluegrass: 23.4ha;

⁶ For definitions of MSES refer to schedule 2 of the Environmental Offsets Regulation 2014.

⁷ NC Act – *Nature Conservation Act 1992*

ensure this has been formally assessed through the herbarium and there is evidence of the approval.

Protected Wildlife Habitat: The application states that there are a number of areas relating to six species with protected wildlife habitat which will be impacted by the project. This includes the following:

- Known to occur:
 - King bluegrass (vulnerable): 23.4ha;
 - Ornamental snake (vulnerable): 167.84ha (preferred habitat);
 - Squatter Pigeon (vulnerable): 54.82ha (preferred habitat) and 28.71ha (suitable)
- Likely/potential to occur:
 - Common death adder (vulnerable): 80.47ha;
 - Australian painted snipe (vulnerable): 1.8ha;
 - Short-beaked echidna (special least concern): 595.03ha

The applicant has indicated that there will likely be a significant residual impact on king bluegrass and ornamental snake habitat, however this is also a EPBC Act listed threatened species so will be managed under the EPBC Act assessment process. Furthermore, the applicant has indicated a significant residual impact to squatter pigeon and the Australian painted snipe are not anticipated, and as this constitutes an MNES impact it will be assessed under the EPBC Act.

Coastal issues

- | | |
|-----|--|
| NA. | Coastal hazard (erosion, storm tide inundation) |
| NA. | Structures (jetties, pontoons, seawalls) |
| NA. | Reclamation |
| NA. | Port development |
| NA. | Dredging and spoil disposal |
| NA. | Quarry material extraction from tidal water |
| NA. | Artificial waterways (canal estates, lakes) |
| NA. | Impacts on marine systems |
| NA. | Coastal resources (natural and physical features such as beaches, dunes, wetlands; processes and landforms; vegetation, wildlife etc.) |
| NA. | Public access to coastal and marine resources |

Notes:

None of the above matters are identified to be located within or in the immediate vicinity of the proposed Horse Pit Extension. Therefore, coastal issues are unlikely.

- Ornamental snake: 167.84ha (preferred habitat); and
- Squatter pigeon: 54.82ha (preferred habitat) and 28.71 (suitable habitat).

The Australian painted snipe (1.8ha) also has the potential to occur with intermittent foraging habitat recorded.

It is anticipated that there will be a significant residual impact to MNES areas (king bluegrass and ornamental snake). The CVM proposed amendment has already been submitted to the Federal Government Environment Minister or a delegate for formal assessment and approval. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Tenure issues

- | | |
|-----|--|
| NA. | Protected areas |
| NA. | Native title interests |
| NA. | Offshore jurisdiction |
| NA. | Commonwealth jurisdiction |
| NA. | Interstate jurisdiction |
| NA. | Legally secured offset area |
| NA. | Occupancy of unallocated state land under tidal waters |

Notes:

The Horse Pit Extension will require the grant of two additional surface area rights by the Department of Resources. An application has been lodged by the applicant to the Department of Resources and therefore the public notification of the Horse Pit Extension will be conducted as a coordinated approach by the Department of Resources.

The joint holders of EA EPML00562013 currently hold the underlying tenures. Therefore it is not anticipated that tenure issues are likely.

Resource allocation

Low	Mining
NA.	Gas / Petroleum
NA.	Quarry material allocation under the CPM Act (quarry material extraction from below tidal water)
Low	Water allocation
NA.	Occupancy of fish habitat area (resource allocation under the Fisheries Act)
NA.	Commercial opportunities on national parks and marine parks
Low	Allocation of public resources (e.g. physical and natural resources environmental capacity)

Notes:

The proposed amendment is not anticipated to significantly increase the intensity of the relevant activity beyond what is currently approved with no change in the rate of extraction. The application states that Caval Ridge mine will continue to produce up to 15 million tonnes per annum (Mtpa) of ROM coal. The EA does not specify a ROM or production rate. Caval Ridge Mine also processes ROM coal from Peak Downs onsite. This information is able to be sourced via an information request including the following:

- Production limits from both Caval Ridge Mine and Peak Downs Mine;
- The production of waste from each site as well as the volume of waste from Caval Ridge versus Peak Downs Mine that is disposed of at Caval Ridge.

There are no changes to the approved mining methods proposed and material characteristics of coal and overburden remain unchanged. The proposed amendment will result in an additional 910.7ha of disturbance to the current disturbance footprint of 6,306ha (current ERC decision) resulting in an approximate 14% increase in surface area disturbance. Additional information regarding the necessity of this amount of proposed disturbance particularly around the proposed out of pit dump can be sought in the information request.

Water issues

Low	Water quality
Low	Discharges
Low	Groundwater
Low	Surface water
Low	Hydrology
NA.	Diversions
Low	Cumulative impacts (e.g. groundwater)
Low	Impacts on stream flows (geomorphological)
NA.	Impacts on bank stability
Unknown	Waterways management
NA.	Impacts on freshwater systems
NA.	Regulated structures (e.g. dams)
NA.	Cumulative management areas under the <i>Water Act 2000</i>

Notes:

The applicant has stated that there is no anticipated increase in the demand for water and the current mine water system will maximise water re-use for dust suppression and coal processing. Additional water management infrastructure is being proposed as well as the relocation of dams currently located within the project site. However, it is not anticipated that there will be an increase in the need for mine affected water (MAW) dams. Any potential releases to surface waters are to comply with the conditions of the existing EA. There are no additional discharge points proposed and no change in release quality or quantity limits to surface waters.

Air issues

Low	Air shed management
High	Pollution
High	Health
High	Nuisance
NA.	Ecological impacts
NA.	Odour

Notes:

The proposed amendment triggered the requirement for public notification based on the risk associated with the project's air quality impacts. According to the application, the frequency of unmitigated dust emission exceedances is anticipated to increase as well as the predicted monthly average dust deposition over the life of mine at sensitive receptors located at Site 6 (Long Pocked Rd) and Site 8 (Moranbah Airport) as shown below:

- Site 6 (Long Pocket Rd west, DP6): An increase from 129 mg/m²/day to and above-objective level of 140 mg/m²/month which represents as 8% increase.
- Site 8 (Moranbah Airport, DP8): An increase from 115 mg/m²/day to and above-objective level of 138 mg/m²/month which represents as 20% increase.

Furthermore there is anticipated to be a significant increase in the operational risk for PM10 concentrations for most sensitive receptor locations located at Site 2 (Surrogate for Moranbah Township);

There are four minor ephemeral drainage lines within the proposed project site. The applicant has stated that these drainage lines do not require a diversion and therefore will be mined through as mining progresses. According to section 5(3) of the *Water Act 2000*, a watercourse does not include a drainage feature.

The proposed construction of the Horse Pit North levee and the Horse Pit West levee is modelled to achieve flood immunity of up to and including a 0.1% Annual Exceedance Probability (AEP) event. The construction of the levees and the Horse Pit Crossing for the haul trucks will occur during the dry season to minimise soil disturbance to the adjacent waterways and will be in line with the current Erosion and Sediment Control Plan.

Furthermore, in terms of surface water run-off, the applicant has stated that the proposed changes “are unlikely to cause changes to the flow regime that may result in impacts to downstream users or the environment”

Site 6 (Long Pocket Road) and Site 8 (Moranbah Airport) as shown below:

- Site 2 (Long Pocket Rd East, Surrogate for Moranbah Township, DP2): An increase from 50 $\mu\text{g}/\text{m}^3$ to 57 $\mu\text{g}/\text{m}^3$ which is a 14% increase above the objective listed in condition B6 of the EA;
- Site 6 (Long Pocket Rd west, DP6): An increase from 50 $\mu\text{g}/\text{m}^3$ to 52 $\mu\text{g}/\text{m}^3$ which is a 4% increase;
- Site 8 (Moranbah Airport, DP8): An increase from 65 $\mu\text{g}/\text{m}^3$ to 89 $\mu\text{g}/\text{m}^3$ which is a 37% increase. The difference from the objective listed in condition B6 of the EA is a 78% increase.

The application documents have not specified the revised predictions based on proposed mitigation and management measures. The assessing officer is unable to identify if the implementation measures will be sufficient to demonstrate, as per the existing EA condition, that there will not be a substantial change in the concentration of PM10 at sensitive or commercial places once all reasonable and practical measures have been taken or that mitigation and management measures are predicted to reduce PM10 concentrations to a level compliant with the Environmental Protection (Air) Policy 2019, when measured at sensitive or commercial places.

There have been ongoing discussions with the applicant who is aware that further information will be sought as part of the information request to address the concerns regarding the justification for and suitability of mitigation measures and strategies to effectively be able to meet the current conditions of the EA and levels detailed in Environmental Protection (Air) Policy 2019.

Noise and vibration issues

Low	Community noise
Low	Transportation noise
Low	Industrial noise
Low	Ground vibration
Low	Airblast overpressure
Low	Low frequency
NA.	Marine noise (underwater)
NA.	Ecological impacts

Notes:

Extension of operations northward will bring mining activities closer in proximity to the town of Moranbah and the Moranbah Airport.

Noise assessment reports identified that there were two sensitive receptors that would be impacted by the proposed amendment where the applicant would not be able to comply with the noise limits specified in the

Waste issues

NA.	Solid waste
NA.	Liquid waste
NA.	Gaseous waste
NA.	Dredge spoil disposal
NA.	Energy
NA.	Best practice environmental management
NA.	Waste water
High	Rock waste dumps
Low	Non-acid forming and potentially acid forming material

Notes:

The Horse Pit Extension will increase the quantity of waste rock and coal rejects generated. The additional waste rock will be disposed of within the in-pit waste rock dump and the proposed out of pit dump.

CVM EA EPML00562013, under standard mitigation measures circumstances. It was predicted that in 2050 under adverse weather conditions, sensitive receptor R2 (881 Long Pocket Rd) and R7 (Skyville) would exceed the noise limits by 2dB and 1dB respectively. However, the application states that additional mitigation measures will be implemented to reduce noise levels at these sensitive receptors and will ensure compliance with the EA conditions.

The additional noise mitigation and management strategies are deemed appropriate to reduce the noise impacts for sensitive receptors and ensure the applicant complies with current conditions of the EA. These strategies include:

- The progressive replacement of standard steel rollers with relatively quieter polymer rollers which is anticipated to result in a decrease in noise emissions by 5dB; and
- The installation of noise suppression kits on dozers working on the proposed out of pit dump;
- Design of the out of pit dump and operation of dozers on the out of pit dump.

The applicant's Noise and Vibration Impact Assessment stated that the Horse Pit extension is anticipated to comply with the current EA conditions regarding blasting or vibration impacts and therefore the current mitigation measures and management strategies will continue to be implemented.

However, it is important to note that the Noise and Vibration Impact Assessment did not consider impacts to the Moranbah Airport which the applicant does not consider as a sensitive or commercial receptor. This will be addressed in the information request.

Land issues

High	Land disturbance
Low	Contaminated land
NA.	Acid sulfate soils
Low	Erosion/stability
NA.	Subsidence
Low	Landscape
Unknown	Effects on hydrology (surface and underground)
Low	Sustainable use
Low	Land use history and compatibility
Low	Areas of regional interest ⁸
NA.	Compliance with planning schemes
High	Rehabilitation and subsequent use
NA.	Native title rights
NA.	Rehabilitation issues (for existing activities)
Low	Non-acid forming and potentially acid forming material

The applicant has stated that there is limited potential for acid mine drainage from the project. The geological environment and geochemical characteristics are proposed to be consistent with that of the existing Horse Pit. Therefore current mitigation and management strategies of waste product are not expected to change.

The necessity of an additional out of pit dump as opposed to increasing the backfilling of the existing pit is unclear. As previously mentioned, this will be addressed in the information request as to an options analysis.

Cultural and heritage issues

NA.	Aboriginal and Torres Strait Islander cultural sites
NA.	European cultural heritage significance (historic sites, buildings and locations)
NA.	Queensland heritage place (<i>Queensland Heritage Act 1992</i>)
NA.	Designated landscape area (<i>Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987</i>)
NA.	Native title rights

Notes:

None of the above matters are identified as being located within or in the immediate vicinity of the proposed Horse Pit Extension area. Therefore, there are likely to be no cultural and heritage issues.

⁸ <https://planning.dsdmip.qld.gov.au/planning/regional-planning-interests-act/areas-of-regional-interest>

High Final voids
High Progressive rehabilitation and closure plan

Notes:

An additional 910.71ha of disturbance is proposed to the current disturbance footprint of 6,306ha (as per the current ERC decision) resulting in an approximate 14% increase in surface area disturbance.

The proposed amendment has stated that a final void of 680ha will remain as the final landform design. The application provides conflicting information and it is not clear whether this final void will be able to sustain the stated post-mining land use of a useable water storage or biologically viable water resource or if the final void will result in the stated non-use management area (NUMA). If the void is left as a NUMA, this would result in up to 680ha of land lost as a future productive resource.

The assessing officer is not satisfied that there is currently sufficient information justifying the appropriateness of the final void. Further information will be sought during the information request as to an options analysis for the void outcomes and the ability for rehabilitation activities to occur in the voids proposed final location (close to the tenure boundaries of ML1775).

The Caval Ridge Mine progressive rehabilitation and closure plan is due to be submitted on 1 December 2022. This date may conflict with the current EA amendment assessment.

Impacts on surrounds and transport

Low Transportation (air, rail, road, port, shipping)
NA. Visual impacts
Medium Compatibility with surrounding uses, activities and land users
NA. Adjacent landholders
Medium Amenity
Medium Community & landholder views
NA. Lighting

Notes:

The proposed amendment will extend the current Caval Ridge Mine by approximately 30 years ensuring jobs for the local communities and utilising existing roads and transportation requirements. Caval Ridge Mine is already located in close proximity to the town of Moranbah and the Moranbah airport with the proposed extension bringing the mine even closer.

It is uncertain at this point whether there will be any issues of the proposed project on the public safety (or perception of public safety) of air travel particularly in regard to the closer proximity of the Horse Pit to the airport and consequently the impacts from air quality, lighting impacts and the reduction in land availability. These potential issues will be addressed in the information request to ensure public safety.

Social issues

Low Accommodation
Low Transport of workers
NA. Fly-in/fly-out (*Strong and Sustainable Resource Communities Act 2017*)
NA. Drive-in/drive-out (*Strong and Sustainable Resource Communities Act 2017*)
NA. Displacement of use
Medium Public safety
NA. Politics/policy
Medium Compatibility with surrounding uses, activities and land users

Notes:

The proposed Horse Pit Extension will ensure the current workforce of employees, contractors and local businesses reliant on the operation of the Caval Ridge Mine continue to have work available for an additional ~30 years.

It is not anticipated that the extension of the life of mine at Caval Ridge will significantly change from the current workforce.

It is uncertain at this point whether the currently proposed final design of the mine will raise further community concern regarding public safety, particularly as the proposed highwall would be located in closer proximity to the Peak Downs

highway and Moranbah Access Road, furthermore with the proximity of the mine to the town of Moranbah. These potential issues will be addressed in the information request to ensure public safety.

Published on DESI Disclosure Log
RTI Act 2009

PART B – TRIGGER CRITERIA

An EIS will be required if any of the following trigger criteria are met. If no criteria are triggered, this does not provide an exemption from having to prepare an EIS if the administering authority for the department considers that there may be a significant environmental impact, or there is a high level of uncertainty about the possible impacts, or there is a high level of public interest in the proposal.

For each question, indicate whether the answer is ‘yes’ or ‘no’:

Criteria	Yes	No
For greenfield (new) mine proposals (sections 70 or 143 of the EP Act)		
1. Would the application involve the removal of two million tonnes per year or more of run-of-mine (ROM) ⁹ ore or coal?	☐	☒
2. Would the application involve the removal of one million tonnes per year or more of run-of-mine (ROM) ore or coal on or under a floodplain ¹⁰ or in a coastal hazard area ¹¹ ?	☐	☒
3. Would the application involve the introduction of a novel or unproven resource extraction process, technology or activity ¹² ?	☐	☒
For proposals to amend/alter an existing mine (sections 143 and 228 of the EP Act)		
4. For mines already removing 2 – 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 100% or 5 million tonnes per year (whichever is the lesser)?	☐	☒
5. For mines already removing over 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 50% or 10 million tonnes per year (whichever is the lesser)?	☐	☒
6. For mines already removing more than 20 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 25%?	☐	☒
7. Would the application involve an extension into and significant impact on a Category A or B environmentally sensitive area, which is not already authorised by the State?	☒	☐
8. Would the application involve a substantial change in mining operations – such as from underground to open cut, or (for underground mining) a change in operations from one causing little subsidence to one likely to cause substantial subsidence?	☐	☒
9. Would the application introduce a novel or unproven resource removal process, technology or activity?	☐	☒
For petroleum and gas activities (sections 70, 143 and 228 of the EP Act)		

⁹ ROM ore or coal means the material excavated but prior to washing or chemical concentration. It does not include overburden.

¹⁰ The *Water Act 2000* defines a floodplain as an area of reasonably flat land adjacent to a watercourse that— (a) is covered from time to time by floodwater overflowing from the watercourse; and (b) does not, other than in an upper valley reach, confine floodwater to generally follow the path of the watercourse; and (c) has finer sediment deposits than the sediment deposits of any bench, bar or in-stream island in the watercourse. See also the Queensland Floodplain Assessment Overlay at the *Wetland Info* section of the department's website at <https://wetlandinfo.des.qld.gov.au/wetlands/>.

¹¹ A coastal hazard area is an area vulnerable to coastal hazards, referred to as coastal erosion or storm tide inundation (as per the departmental coastal hazard area mapping). Maps of these areas are accessible at http://www.des.qld.gov.au/coastal/management/coastal_plan_maps.php and <http://qldspatial.information.qld.gov.au/catalogue/custom/index.page>.

¹² For example: underground coal gasification; in-seam coal slurring; a new method of ore concentration; but this will be decided on a case-by-case basis and this trigger is not intended to discourage innovation.

10. Would the application involve a total disturbance area of greater than 2000 hectares at any one time during the life of the proposed project? This includes areas occupied by well pads (single or multi-directional), access tracks and roads, water storages, and process plants?	☐	☒
11. Would the application involve the construction of a high pressure pipeline over a distance of 300 kilometre or greater?	☐	☒
12. Would the application involve the construction of a liquefied natural gas plant?	☐	☒
General considerations		
<p><i>Where needed, make comments on the rating of the application against the trigger criteria.</i></p> <p>According to the Queensland Government ESA – Mining Activities mapping tool, the proposed project is anticipated to impact Category B ESAs. However, this was ground-truthed by the applicant and the regrowth vegetation present in this area does not meet the definitions under the <i>Offsets Act 2014</i> and therefore offsets will not be required.</p> <p>The proposed amendment does not relate to a new greenfield mine proposal or to petroleum and gas activities, therefore these triggers are not applicable. The Caval Ridge Mine already removes over 10 million tonnes of ROM ore or coal and the current application does not increase the current annual ROM or production rate by more than 50% or 10 million tonnes per year. Therefore, the application to amend EA EPML00562013 does not trigger any of the above criteria for an amendment to an existing mine.</p>		

PART C – STANDARD CRITERIA

The standard criteria have to be considered in making the EIS decision. Provide comments on the standard criteria as defined under schedule 4 of the EP Act (where relevant):

Standard criteria, EP Act, schedule 4, definitions (current as at 1 January 2018)¹³:

Standard criteria	Comment
Standard criteria means –	
<p>(a) the following principles of environmental policy as set out in the Intergovernmental Agreement on the Environment—</p> <ul style="list-style-type: none"> (i) the precautionary principle; (ii) intergenerational equity; (iii) conservation of biological diversity and ecological integrity; and 	<p>The assessing officer has considered the precautionary principle, intergenerational equity and conservation of biological diversity and ecological integrity.</p> <p>The assessing officer is satisfied that the proposed amendment will not introduce any novel or untested methodologies. Further, any threats of serious or irreversible environmental harm are able to be evaluated in the assessment of this application and indicated in the application to be able to be subsequently managed by the applicant.</p> <p>The assessing officer is currently not satisfied that the proposed amendment will not deleteriously affect the health, diversity, and productivity of the environment for future generations. The amendment lacks details regarding:</p> <ul style="list-style-type: none"> • The applicant's ability to appropriately manage and mitigate air quality emissions; • Sufficient justification as to the necessity of an out of pit dump instead of backfilling the current Horse Pit; • Sufficient justification as to the extent of the final void; • The ability of the final void to sustain a post-mining use; and • If the final void is to remain as a non-use management area, the applicant has not provided additional studies and options to reduce the extent and consequently ensure more land is available for the use by future generations. <p>Although the assessing officer is not satisfied with the aforementioned aspects, these concerns are able to be sought via an information request.</p> <p>The assessing officer is satisfied that the proposed amendment will not compromise biodiversity or ecological integrity. The majority of the land, the subject of the amendment application, has historically been cleared of vegetation for agricultural purposes and includes only minimal areas of remnant vegetation. Furthermore, significant residual impacts</p>

¹³ Check standard criteria against latest version of the EP Act and amend if required
<https://www.legislation.qld.gov.au/view/html/inforce/current/act-1994-062>

	to MNES and MSES areas will require offsets prior to any disturbance to these areas.
(b) any Commonwealth or State government plans, standards, agreements or requirements about environmental protection or ecologically sustainable development; and	The assessing officer has considered the <i>Environmental Protection Act 1994</i> (EP Act), its subordinate legislation, the <i>Environmental Protection Regulation 2019</i> (EP Reg) and additional supporting policies.
(d) any relevant environmental impact study, assessment or report ; and	The assessing officer has considered all technical assessments and supporting information provided with the application.
(e) the character, resilience and values of the receiving environment; and	The assessing officer has considered the character, resilience and values of the receiving environment based on the information provided by the applicant within the application form and supporting information. Further, aside for air quality and the final void landform design (which are able to be addressed in the information request), the application's proposed management actions to maintain the character, resilience and values of the receiving environment, are likely to be sufficient, when combined with appropriate conditioning in EA EPML00562013.
(f) all submissions made by the applicant and submitters; and	The assessing officer has considered all application material submitted by the applicant. The application has triggered public notification under section 230 of the EP Act and therefor submissions made against the amendment application can be considered during the decision stage.
(g) the best practice environmental management for activities under any relevant instrument, or proposed instrument, as follows— <ul style="list-style-type: none"> (i) an environmental authority; (ii) a transitional environmental program; (iii) an environmental protection order; (iv) a disposal permit; (v) a development approval; and 	The assessing officer has considered the best practice environmental management for the proposed activities. The appropriate regulatory instrument is the EA EPML00562013, and management plans required by the EA. There are no relevant transitional environmental programs, environmental protection order, disposal permit or development approval relevant to the EA or this application.
(h) the financial implications of the requirements under an instrument, or proposed instrument, mentioned in paragraph (g) as they would relate to the type of activity or industry carried out, or proposed to be carried out, under the instrument; and	The assessing officer has considered the financial implications. It can be reasonably expected that the applicant, who initiated the amendment application, has considered any additional financial costs resulting from the extension to the project, and any resulting cost of continuing compliance with changes to the EA conditions. Therefore, any financial implications are considered to be within the applicant's means to pay.
(i) the public interest ; and	The assessing officer has considered the public interest of the proposed amendment. As the project is located in close proximity to multiple sensitive receptors including the town of Moranbah and the Moranbah Airport, there is potential for public interest. The proposed amendment is subject to public notification in which time, the public will have the opportunity to make submissions.

	Additionally, with regards to all decisions, human rights have been considered at this stage of the assessment process. There are no reasonably foreseeable limitations for human rights under the <i>Human Rights Act 2019</i> for the assessment of the requirement for an EIS.
(j) any relevant site management plan ; and	There are no relevant site management plans for the land that is subject of this application.
(k) any relevant integrated environmental management system or proposed integrated environmental management system; and	There is no relevant integrated environment management system or proposed integrated environmental management system applicable to the EA or this application.
(l) any other matter prescribed under a regulation.	There are no further matters prescribed under regulation (i.e. the EP Reg.) for consideration.
General considerations	
<p><i>Where needed, make comments on the rating of the application against the standard criteria.</i></p> <p>With consideration of the above comments, the proposed amendment application is reasonably expected to be compliant with the standard criteria as defined by Schedule 4 of the EP Act.</p>	

Date : 7/04/2022 3:02:43 PM

From : "Kate Bennink"

To : "Luisa Taufatofua" Luisa.Taufatofua@des.qld.gov.au, "Kathryn Eller" Kathryn.Eller@des.qld.gov.au, "Juliana Mccosker" Juliana.Mccosker@des.qld.gov.au

Subject : FW: CAC Report decision on Caval Ridge Mine Horse Pit Extension

Attachment : CAC decision- Horse Pit Caval Ridge.pdf;image001.png;image003.png;image004.png;

FYI



Kate Bennink
Director (Coal)
Business Centre Coal | Coal and Central Compliance
Environmental Services and Regulation
Department of Environment and Science

Phone: sch 4 - mobile phone

Email: kate.bennink@des.qld.gov.au

From: Chris Loveday <Chris.Loveday@des.qld.gov.au>

Sent: Thursday, 7 April 2022 12:41 PM

To: Kate Bennink

Subject: CAC Report decision on Caval Ridge Mine Horse Pit Extension

CAC decision signed KB



Christopher Loveday
Director
Technical and Assessment Services | Operational Support
Environmental Services and Regulation
Department of Environment and Science

M sch 4 - mobile phone

Level 2 - 22 Herbert Street, Gladstone QLD 4680

CAC decisions for 7 April 2022 are as follows:

Caval Ridge Horse Pit Extension – Environmental Authority (EA) Major Amended Application
CAC members – Chris Loveday and Kate Bennink

- On the 15 December 2021 and on 17 January 2022, the department has received a major amendment application of a site-specific EA and it was determined that the amendment be a major amendment requiring public notification
- The application is BHP Coal Pty Ltd
- Caval Ridge Horse Pit Extension is located 7km south of Moranbah. The Horse Pit Extension located towards the NW of the site.
- BHP proposes to extend the footprint of the existing Horse Pit... This will result in a revised life of mine from 2026 to 2056.
- The Horse Pit Extension Project proposes an additional 910.71ha of disturbance
- It is uncertain whether the currently proposed final design of the mine will raise further community concern regarding public safety
- Activities associated with the Project are not expected to cause environmental harm to any nearby sensitive receptors such as residential housing and/or local businesses. However, mitigation measures will be implemented to prevent or minimise negative impacts on surrounding environmental values.
- The extension of the mine life at CVM will also see further economic benefits to local and regional communities
- The Project facilitates an opportunity to further contribute to Australia's position as a primary global producer of high-quality coking coal products.

Consultation

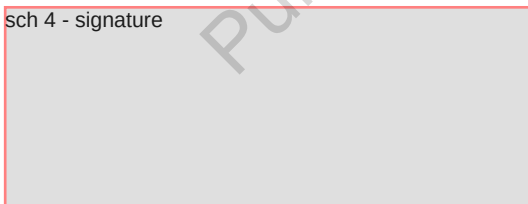
The assessing officer from the Business Centre Coal recommends that an EIS is not required as per Part B – Trigger Criteria.

The application does not trigger the requirements for an EIS under the EP Act for proposals to amend/alter an existing operation.

Decision

An EIS process is **not required** under the EP Act based on consideration of the department's Trigger Criteria, the Standard Criteria and the department's assessment of information provided by the applicant.

sch 4 - signature



Chris Loveday
Director
Technical and Assessment Services
Date: 7 April 2022

Date : 7/04/2022 3:40:57 PM

From : "Kathryn Eller"

To : "Kate Bennink" Kate.Bennink@des.qld.gov.au, "Luisa Taufatofua" Luisa.Taufatofua@des.qld.gov.au, "Juliana Mccosker"

Juliana.Mccosker@des.qld.gov.au

Subject : RE: CAC Report decision on Caval Ridge Mine Horse Pit Extension

Attachment : image001.png;image002.png;image005.png;image006.png;

Thanks Kate ☺



Kathryn Eller

A/Team Leader

Business Centre Coal | Coal and Central Compliance

Department of Environment and Science

P 07 4987 9347

PO Box 731, Toowoomba QLD 4350

From: Kate Bennink <Kate.Bennink@des.qld.gov.au>

Sent: Thursday, 7 April 2022 3:03 PM

To: Luisa Taufatofua; Kathryn Eller; Juliana Mccosker

Subject: FW: CAC Report decision on Caval Ridge Mine Horse Pit Extension

FYI



Kate Bennink

Director (Coal)

Business Centre Coal | Coal and Central Compliance

Environmental Services and Regulation

Department of Environment and Science

Phone: sch 4 - mobile
phone

Email: kate.bennink@des.qld.gov.au

From: Chris Loveday <Chris.Loveday@des.qld.gov.au>

Sent: Thursday, 7 April 2022 12:41 PM

To: Kate Bennink

Subject: CAC Report decision on Caval Ridge Mine Horse Pit Extension

CAC decision signed KB



Christopher Loveday

Director

Technical and Assessment Services | Operational Support

Environmental Services and Regulation

Department of Environment and Science

M sch 4 - mobile phone

Level 2 - 22 Herbert Street, Gladstone QLD 4680

Date : 31/03/2022 5:15:54 PM

From : "Kathryn Eller"

To : "Luisa Taufatofua" Luisa.Taufatofua@des.qld.gov.au

Subject : RE: Caval Ridge Horse Pit Extension CAC Report

Attachment : EA Amendment 20220322 CAC Report EPML00562013 BHP Coal Pty Ltd Caval Ridge Mine KE2.docx;image002.png;image004.png;image001.png;

Hey Lu

Apologies for the delay on this review.

Please see attached my comments. Also, saved back to the G drive folder.

I endorse your recommendation that the application does not require an EIS process.

Please progress to Juliana once comments/edits have been considered.

Let me know if you have any questions.

Cheers,

Kathryn



Kathryn Eller

A/Team Leader

Business Centre Coal | Coal and Central Compliance
Department of Environment and Science

P 07 4987 9347

PO Box 731, Toowoomba QLD 4350

From: Luisa Taufatofua <Luisa.Taufatofua@des.qld.gov.au>

Sent: Tuesday, 22 March 2022 12:32 AM

To: Kathryn Eller

Subject: Caval Ridge Horse Pit Extension CAC Report

Importance: High

Hi Kathryn,

As promised, please find attached the draft Horse Pit Extension CAC Report for your review and feedback prior to sending it to Juliana.

Let me know if there are any questions or if you would like to discuss.

Kind regards,



Luisa Taufatofua

Senior Environmental Officer

Business Centre (Coal) | Coal and Central Qld Compliance
Department of Environment and Science

P 07 4987 9342

99 Hospital Road, Emerald QLD 4720

PO Box 3028, Emerald QLD 4720

Environmental Protection Act 1994

Coordinated assessment committee (CAC) report on the requirement for an environmental impact statement (EIS)

This internal report is for recommendations to the Department of Environment and Science CAC on whether an EIS is required for a project under sections 70, 73A, 143 and 228 of the Environmental Protection Act 1994 (EP Act).

When this report applies

The report format should be used for all resource applications meeting the requirements for a decision by CAC on whether an EIS is required under sections 70, 73C, 143 and 228 of the EP Act.

Specifically, this report should be used for:

- all site-specific resource applications for an environmental authority (EA) (s143 EP Act)
- applications that are major amendments to an EA (s228 EP Act)
- applications for voluntary preparation of an EIS (s70 EP Act)
- applications for: decisions on whether an EIS would be required for EA applications under s73A(1)(a) of the EP Act; and, if relevant, applications to prepare an EIS under s73A(1)(b) of the EP Act, if the chief executive decides an EIS would not be required for an EA application.

Note: this report is **not** for projects that have completed an EIS under the EP Act. It also does **not** apply to 'coordinated projects' under the *State Development and Public Works Organisation Act 1971*.

How to use this report format

This report should be prepared by the nominated assessment officer and should include a recommendation based on an assessment of:

- Part A (department interests)
- Part B (trigger criteria)
- Part C (standard criteria) of this CAC report.

Applications for major EA amendments should attach the assessment level decision (ALD decision) and supporting documentation, such as maps, to this CAC report. The CAC report must be approved and signed by the manager.

The completed CAC report should then be forwarded to Environmental Impact Assessment Team at eis@des.qld.gov.au, carbon copy (cc) to Pauline.Gregory@des.qld.gov.au and Chris.Loveday@des.qld.gov.au.

Applicant and project details

Project name	Caval Ridge Horse Pit Extension
Applicant name ¹	BHP Coal Pty Ltd
Project type	Mining black coal
Tenure details	ML70403; ML1775; ML70462
Project location	Caval Ridge Mine is located 7km south of Moranbah. The proposed Horse Pit Extension located towards the north west of the site.

Administrative details

Application type	Major amendment of a site-specific environmental authority.
Environmental authority no. (if relevant)	EPML00562013
eDOCS reference	101/0000190
Department business centre	Business Centre Coal
EIS decision due (max 3 bd after CAC report) ²	28 March 2022 (*20BD from payment of major fee)
Information request due (section 140 EP Act)	28 March 2022 (*20BD from payment of major fee)

¹ The 'applicant' is the persons, or registered legal entity (not a business trading name) intending to carry out the activity and in whose name the applicable permits or licences are to be issued.

² The EIS decision is due three business days (3 bd) after the CAC report is provided to CAC.

Recommendation³	
<p>After completing Parts A, B and C of this report, mark which of the following applies:</p> <p>(a) EIS is required.....☐</p> <p>(b) No EIS is required.....☒</p> <p>Statement of reasons:</p> <p>The assessing officer recommends that an EIS is not required for the major amendment regarding environmental authority EPML00562013. The major amendment application relates to the extension of the existing Horse Pit to the north east of Caval Ridge Mine, located on mining lease (ML) 1775, ML70403 and ML70462. The application, lodged 15 December 2021 by the principal applicant BHP Coal Pty Ltd, has been assessed against the 'EIS criteria for resource projects' (EIS criteria) as per section 3 of the Department's Guideline – 'Criteria for environmental impact statements for resource projects under the environmental Protection Act 1994' (ESR/2016/2167) (EIS Guideline).</p> <p>The assessing officer has considered the EIS criteria through reference to the application documents, the EIS guideline and the information contained within this report. As a result, the assessing officer has taken into account the following:</p> <ul style="list-style-type: none"> • the 'standard criteria' as per Schedule 4 of the <i>Environmental Protection Act 1994</i> (EP Act); • the trigger criteria as per the EIS triggers for proposals to amend/alter an existing mine; • the relative magnitude of the project with regards to its scale and risk of impacts to environmental values; • the public interest with regards to the amendment and its impacts; • any uncertainties with regards to possible impacts; • any significant issues to be addressed by other Queensland Government or Commonwealth Government authorities; • the social and economic impacts; and • any cumulative impacts. <p>Further, the assessing officer is satisfied that any issues concerning the above can and will be resolved, without the need for an EIS.</p>	
Assessing officer: Luisa Taufatofua	Date: 22/03/2022
Delegate (EP Act): Juliana McCosker	Date: Click here to enter a date.

³ In making this recommendation, the department's guideline *Criteria for environmental impact statements for resource projects under the Environmental Protection Act 1994* (ESR/2016/2167) assists the administering authority to carry out its functions and responsibilities in accordance with the EP Act. This includes empowerment of the right to require an EIS for a resource development project if consideration of the standard criteria (and any other relevant considerations) shows an EIS should be required, irrespective of the triggers in this guideline.

PART A – DES INTERESTS

Additional approval processes required (attach details where necessary):

- ☐ None
- ☐ Other applications received by the department for project
- ☐ A process under the *State Development and Public Works Organisation Act 1971*
- ☒ Commonwealth processes under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- ☐ Other

The applicant has also submitted an application for approval under the EPBC Act which is currently under review. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Special considerations (attach details where necessary):

- ☒ ☐ Affects an environmentally sensitive area (Category A, B and/or C⁴)
- ☐ Involves a large number of individual decisions
- ☒ Is likely to generate significant community concern
- ☐ Needs policy change for approval
- ☐ Applicant suitability⁵
- ☐ Involves significant issues with another Queensland Government/Australian Government authority
- ☐ Involves impacts on an existing legally secured offset area under State and/or Commonwealth legislation
- ☐ Another special circumstance which significantly elevates environmental, social or economic risks beyond those usual for this type of project
- ☐ Other

The amendment is likely to generate significant community concern due to three primary factors:

1. The proposed Horse Pit Extension will bring mining activities within closer proximity to multiple sensitive receptors, specifically it will be located right next to the Moranbah airport and in close proximity to the town of Moranbah and other surrounding homesteads to the north.
2. Furthermore, the potential for air quality impacts to sensitive receptors, particularly at the Moranbah Airport or town of Moranbah, is anticipated to increase significantly which could have issues to the health and wellbeing of sensitive receptors and the general public accessing these areas.
3. The amendment proposes for a final void of 680ha to remain following the closure of the mine. It is not clear whether this void will be able to sustain a post-mining land use or whether it will result in a non-use management area located in close proximity to the Moranbah airport, town of Moranbah and the adjoining highway.

On the other hand, the proposed project is anticipated to have numerous community benefits including the ongoing provision of jobs to those currently employed at Caval Ridge and localised benefits to the town of Moranbah.

Commented [KE1]: Add a line about the Cat. B ESA being affected

⁴ Refer to guideline ESR/2016/1985: 'Eligibility criteria and standard conditions for exploration and mineral development projects'

⁵ Refer to guideline ESR/2015/1771: 'Application to be a registered suitable operator'.

Pre-lodgement advice

Provide information on date, who and what advice was given during the pre-lodgement meeting.

20 October 2020: A Technical Workshop 1 was held between DES, BHP (applicant) and SLR (Consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focussed on air quality, noise, land and geochemistry.

- Air quality: No questions from DES.
- Noise and Vibration: DES queried how old the data proposed to be used for cumulative impact assessments was.
- Land: DES queried the depth of topsoil and stated that DES will be looking very closely at topsoil management going forward.
- Geochemistry: No questions from DES.

21 October 2020: A Technical Workshop 2 was held between DES, DAWE and BHP (applicant) and SLR (consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focused on terrestrial ecology, GDEs, Groundwater and Surface Water.

- Terrestrial Ecology: DES had queries around Horse Creek, herbarium mapping and that offsets may be required.
- Groundwater: DES had queries around mapping and details of proposed bores.
- GDEs: DES reiterated that it is not DES's role to comment on the methodology of the assessments but to assess the assessment. DES also expressed those reports, documents and technical information would need to be provided prior to DES providing any detailed feedback.
- Surface Water: DES queried any interactions between pit flows and surface water flows to Horse Creek which SLR consulting confirmed there would be no interactions.

19 August 2021: A pre-lodgement meeting was held between DES and BHP to discuss the Caval Ridge Horse Pit Extension Project. At this meeting a site visit was organised to be held on 28 August 2021.

28 August 2021: A site visit was undertaken to Caval Ridge.

Other issues

Provide information on any other issue not covered in this CAC report.

The application was submitted on 15 December 2021 and on 17 January 2022, it was determined that the amendment be a major amendment requiring public notification. The project was deemed to be likely to be a substantial increase in the risk of environmental harm and the risk is the result of a substantial change in the results of the release of a quantity or quality of a contaminant permitted to be released into the environment. This was triggered due to the significant increase in the air quality impacts predicted from the study particularly around dust and PM10 emissions. The air quality technical report provided with the application did not provide sufficient justification that the applicant would be able to reduce the air quality impacts to below the 10% trigger limit. On 18 January 2022 and 10 February 2022, the Department had a meeting with the applicants to discuss the issues regarding the air quality impacts. The applicant advised that they would be providing updated technical reports to demonstrate how Caval Ridge will be able to reduce the air quality impacts and comply with the conditions of the EA. Such was to be provided following withdrawal of the application and subsequent resubmission. The applicant decided to progress with the application including public notification instead.

DES interests

If an impact is indicated, provide information on the level and significance of the impact on the matter

Background

On 15 December 2021, the administering authority (the Department of Environment and Science [DES]) received an application for an amendment to EA EPML00562013 which is held by the Central Queensland Coal Associates Joint Venture (CQCA JV) with BM Alliance Coal Operations Pty Ltd (BMA) as both the manager and the agent on behalf of the CQCA JV. Caval Ridge Mine is located on mining lease (ML) 1775, ML70403 and ML70462 and is approximately 7km south of Moranbah in the Bowen Basin, Queensland.

Amendment Description

The applicant proposes to extend an existing northern mine pit, named Horse Pit. This will result in a revised life of mine from 2026 to 2056, adding 30 years to the operation to that of existing approvals. The Horse Pit Extension Project proposes an additional 910.71 ha of disturbance and will include:

- The extension of the Horse Pit (655.65 ha in the north east of ML 1775);
- The addition of an out of pit dump (107.31 ha) in the northwest of ML 70403;
- The relocation of existing infrastructure located within the proposed Horse Pit extension site including the EME Build Pad, blasting compound with two potential relocation options, back access roads, substations, go-lines and powerlines;
- The construction of two additional regulated flood levees to protect the proposed project area from potential flood events (up to 0.1% Annual Exceedance Probability (AEP)).
- The northern (Horse Pit North) levee will be approximately 1.4km in length and bounds a portion of Horse Pit in the north of the proposed pit; and
- The western (Horse Pit West) levee will be approximately 400m in length and located within the south west extent of the proposed out of pit dump.
- The construction of a bridge over Horse Creek and the extension of the haul road to the north west of ML 70403 to access the proposed out of pit dump
- The construction of sediment dams as well as both clean water and MAW diversion drains to manage runoff from the proposed OOPD;
- The relocation of the Peak Downs Highway dragline crossing; and
- A Post-closure rehabilitated final landform with a single final void of approximately 680ha in the far east of ML1775.

Commented [KE2]: Doe this stand for Out of pit dump? If so, use this acronym throughout the report including the points above.

CVM Justification for the proposed amendment

The Project proposes to extend the footprint of the existing Horse Pit at the CVM. ~~As a result of exploiting efficiencies in mine sequencing and planning, mining activities are currently~~ scheduled to reach the limit of the approved Horse Pit extent during Financial Year (FY) 2025, with some existing site infrastructure potentially being relocated from 2023. If approved, the extension is projected to extend the mine's life from the 2030s to the 2050s, protecting jobs and royalties into the future.

Significant mine engineering design has been undertaken to accommodate for the Project, which will utilise existing CVM infrastructure for coal processing, tailings disposal and rail loadout of product coal, amongst other things. The Project facilitates an opportunity to further contribute to Australia's position as a primary global producer of high-quality coking coal products. The Project will extract otherwise under-utilised resources from an area already disturbed by previous land uses which provides benefits over establishing a mine at a greenfield site. The extension of the mine life at CVM will also see further economic benefits to local and regional communities. Activities associated with the Project are not expected to cause environmental harm to any nearby sensitive receptors such as

residential housing and/or local businesses. However, mitigation measures will be implemented to prevent or minimise negative impacts on surrounding environmental values.

Other Matters

The applicant has provided an EIS Trigger Assessment in the 'EA Amendment Supporting Information' (refer Table 2-2 and Table 2-3) in which they have stated that no EIS triggers are relevant to the Project. The applicant has also stated that they anticipate that the ERAs listed on the current EA EPML00562013 will remain the same.

Matters of state environmental significance (MSES⁶) and related matters

Medium Regulated vegetation:

- endangered and of concern regional ecosystems (REs)
- REs that intersect with a watercourse on Vegetation management (VM) watercourse map
- REs that intersect with a wetland on a VM wetland map
- REs that are also essential habitat for endangered and vulnerable species

Medium Connectivity areas

NA. Wetlands: wetland protection areas, high ecological significance wetlands, high ecological value wetlands and waterways

NA. Strategic environmental area

High Protected wildlife habitat:

- endangered and vulnerable protected flora
- Three types of koala habitat: bushland koala habitat, medium value rehabilitation habitat and high value rehabilitation habitat (SEQ)
- habitat for animal that is endangered, vulnerable or special least concern

NA. Protected areas part of State Forest under the Forestry Act 1959

NA. Highly protected marine park zones

NA. Fish habitat areas

NA. Watercourse providing for fish passage

NA. Marine plants

NA. Legally secured offset areas

Notes:

The Project is likely to have a significant residual impact on matters of state environmental significance (MSES) on 4 key areas:

1. Regulated vegetation – 23.4ha
2. Connectivity – 84.19ha
3. King bluegrass – 23.4ha
4. Ornamental snake – 167.84ha

Regulated Vegetation: The project has identified 31.44ha of 'Of Concern' RE 11.8.11 which is king bluegrass (*Dichanthium sericeum*).

Other

High Endangered, vulnerable and special least concern species (NC Act)⁷

Low Environmentally sensitive areas A, B and C

NA. Vegetation clearing

Medium Terrestrial ecology

NA. Groundwater-dependent ecosystems

Notes:

According to the Queensland Government ESA – Mining Activities mapping tool, the proposed amendment will impact on approximately 60.52ha of Category B Endangered Regional Ecosystems on RE11.7.1 which has a biodiversity status of 'Of Concern' and a Vegetation Management Act class of 'Least Concern'.

Commented [KE6]: To check/discuss

According to the Terrestrial Ecology Assessment provided with the application, the disturbance footprint was ground-truthed to confirm the presence of the following endangered REs:

- Endangered HVR RE 11.3.1: ~0.09ha
- Endangered regrowth RE 11.4.8: ~0.14ha
- Endangered regrowth RE 11.4.9: ~497.88ha

The listed ESAs are not categorised as MSES areas and therefore the applicant does not anticipate that an environmental offset is required.

Matters of national environmental significance (MNES)

High Listed threatened species and ecological communities under the EPBC Act

NA. Great Barrier Reef Marine Park

NA. Wetlands of International importance

NA. Migratory species (international agreements)

NA. World Heritage Properties

NA. National Heritage places

NA. Commonwealth marine areas

NA. Nuclear actions

Commented [KE3]: Numbers don't match up with above

⁶ For definitions of MSES refer to schedule 2 of the Environmental Offsets Regulation 2014.

⁷ NC Act – Nature Conservation Act 1992

Connectivity Areas: The project has identified 84.19ha of connectivity area which was ground-truthed by the applicant as remnant REs. This comprises of RE 11.8.11 and 11.7.1 The Terrestrial Ecology Report identified 112.4ha of remnant vegetation

Protected Wildlife Habitat: According to the proposed The application states that amendment provided by the applicant, there are a number of areas relating to six species with protected wildlife habitat which will be impacted by the project. This includes the following:

- Known to occur:
 - King bluegrass (vulnerable): 23.4ha;
 - Ornamental snake (vulnerable): 167.84ha (preferred habitat);
 - Squatter Pigeon (vulnerable): 54.82ha (preferred habitat) and 28.71ha (suitable)
- Likely/potential to occur:
 - Common death adder (vulnerable): 80.47ha;
 - Australian painted snipe (vulnerable): 1.8ha;
 - Short-beaked echidna (special least concern): 595.03ha

The applicant has indicated that there will likely be a significant residual impact on king bluegrass and ornamental snake habitat, however this is also a EPBC Act listed threatened species so will be managed under the EPBC Act assessment process. Furthermore, the applicant has indicated a significant residual impact to squatter pigeon and the Australian painted snipe are not anticipated, and as this constitutes an MNES impact it will be assessed under the EPBC Act.

The applicant has also anticipated that there will be a significant residual impact on MNES areas from the project on regulated vegetation and connectivity areas. The assessment of the EA amendment will consider whether the other MNES impacts (common death adder and short-beaked echidna) would also constitute a significant residual impact.

Coastal issues

- NA. Coastal hazard (erosion, storm tide inundation)
- NA. Structures (jetties, pontoons, seawalls)
- NA. Reclamation
- NA. Port development
- NA. Dredging and spoil disposal
- NA. Quarry material extraction from tidal water
- NA. Artificial waterways (canal estates, lakes)
- NA. Impacts on marine systems
- NA. Coastal resources (natural and physical features such as beaches, dunes, wetlands);

High A water resource in relation to CSG and large coal mining developments (IESC)

Notes:

There are three EPBC Act listed threatened species (one flora species and two fauna species) which have been identified in the disturbance footprint of the project as known or likely to occur within the area, this includes:

- King bluegrass: 23.4ha;
- Ornamental snake: 167.84ha (preferred habitat); and
- Squatter pigeon: 54.82ha (preferred habitat) and 28.71 (suitable habitat).

The Australian painted snipe (1.8ha) also has the potential to occur with intermittent foraging habitat recorded.

It is anticipated that there will be a significant residual impact to MNES areas (king bluegrass and ornamental snake). The CVM proposed amendment has already been submitted to the Federal Government Environment Minister or a delegate for formal assessment and approval. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Commented [KE4]: Note for information request Does it align with state mapping, if not it will need to go to the Herbarium for assessment. They will need

Commented [KE5]: Have they do an on site assessment of the likely species present? If not we probably need to request this in the information request.

Tenure issues

- NA. Protected areas
- NA. Native title interests
- NA. Offshore jurisdiction
- NA. Commonwealth jurisdiction
- NA. Interstate jurisdiction
- NA. Legally secured offset area
- NA. Occupancy of unallocated state land under tidal waters

Notes:

The Horse Pit Extension will require the grant of two additional surface area rights by the Department of

processes and landforms; vegetation, wildlife etc.)
NA. Public access to coastal and marine resources

Notes:

None of the above matters are identified to be located within or in the immediate vicinity of the proposed Horse Pit Extension. Therefore, coastal issues are unlikely.

Resources. An application has been lodged by the applicant to the Department of Resources and therefore the public notification of the Horse Pit Extension will be conducted as a coordinated approach run by the Department of Resources.

The joint EA holders of EA EPML00562013 currently hold a majority of the underlying land tenures. Therefore it is not anticipated that tenure issues are likely.

Commented [KE7]: Is there areas they don't hold?

Published on DESI Disclosure Log
RTI Act 2009

Resource allocation

Low	Mining
NA.	Gas / Petroleum
NA.	Quarry material allocation under the CPM Act (quarry material extraction from below tidal water)
Low	Water allocation
NA.	Occupancy of fish habitat area (resource allocation under the Fisheries Act)
NA.	Commercial opportunities on national parks and marine parks
Low	Allocation of public resources (e.g. physical and natural resources environmental capacity)

Notes:

The proposed amendment is not anticipated to significantly increase the intensity of the relevant activity beyond what is currently approved with no change in the rate of extraction. The application states that Caval Ridge mine will continue to produce up to 15 million tonnes per annum (Mtpa) of ROM coal. ~~this information is currently missing from the EA and therefore the EA will be amended to specify this production limit. The EA does not specify a ROM or production rate.~~ Caval Ridge Mine also processes ROM coal from Peak Downs onsite. ~~This information is able to be sourced via an information request including the following and therefore further details regarding this arrangement will be sought in the information request including:~~

- Production limits from both Caval Ridge Mine and Peak Downs Mine;
- The production of waste from each site as well as the volume of waste from Caval Ridge versus Peak Downs Mine that is disposed of at Caval Ridge. ~~This information gap may highlight a current issue with the current arrangement and why an additional overburden dump at Caval Ridge Mine is being sought by the proposed amendment.~~
-

There are no changes to the approved mining methods proposed and material characteristics of coal and overburden remain unchanged. The proposed amendment will result in an additional 910.7ha of disturbance to the current disturbance footprint of 6,306ha (current ERC decision) resulting in an approximate 14% increase in surface area disturbance. Additional information regarding the necessity of this amount of proposed disturbance particularly around the proposed out of pit dump ~~can be sought will be addressed~~ in the information request.

Water issues

Low	Water quality
Low	Discharges
Low	Groundwater
Low	Surface water
Low	Hydrology
NA.	Diversions
Low	Cumulative impacts (e.g. groundwater)
Low	Impacts on stream flows (geomorphological)
NA.	Impacts on bank stability
Unknown	Waterways management
NA.	Impacts on freshwater systems
NA.	Regulated structures (e.g. dams)
NA.	Cumulative management areas under the <i>Water Act 2000</i>

Notes:

The applicant has stated that there is ~~not~~ anticipated ~~to be an~~ increase in the demand for water and the current mine water system will maximise water re-use for dust suppression and coal processing. Additional water management infrastructure is being proposed as well as the relocation of dams currently located within the project site. However, it is not anticipated that there will be an increase in the need for mine affected water (MAW) dams. Any potential releases to surface waters are to comply with the

Air issues

Low	Air shed management
High	Pollution
High	Health
High	Nuisance
NA.	Ecological impacts
NA.	Odour

Notes:

The proposed amendment triggered the requirement for public notification based on the risk associated with the project's air quality impacts. According to the application, the frequency of ~~unmitigated dust~~ emission exceedances is anticipated to increase as well as the predicted monthly average dust deposition over the life of mine at sensitive receptors located at Site 6 (Long Pocked Rd) and Site 8 (Moranbah Airport). Furthermore there is anticipated to be a significant increase in the operational risk for PM10 concentrations for most sensitive receptor locations located at Site 2 (Surrogate for Moranbah Township); Site 6 (Long Pocket Road) and Site 8 (Moranbah Airport) ~~which will result in impacts to the health and wellbeing of sensitive receptors.~~

The application documents have not specified the revised predictions based on proposed mitigation and management measures. The assessing officer is

Commented [KE8]: Add some numbers around this – like those from the property made checklist.

conditions of the existing EA. The proposed amendment is unlikely to result in additional discharges to waters beyond what is currently authorised. There are no additional discharge points proposed and no change in release quality or quantity limits to surface waters.

There are currently four minor ephemeral drainage lines which occur within the proposed project site. The applicant has stated that the minor these drainage lines do not require a diversion and therefore will be mined through as mining progresses. According to section 5(3) of the *Water Act 2000*, a watercourse does not include a drainage feature.

The proposed construction of the Horse Pit North levee and the Horse Pit West levee is modelled to achieve flood immunity for the project for up to and including a 0.1% Annual Exceedance Probability (AEP) event. The construction of the levees and the Horse Pit Crossing for the haul trucks will occur during the dry season to minimise soil disturbance to the adjacent waterways and will be in line with the current Erosion and Sediment Control Plan.

Furthermore, in terms of surface water run-off, the applicant has stated that the proposed changes "are unlikely to cause changes to the flow regime that may result in impacts to downstream users or the environment"

Noise and vibration issues

Low Community noise
Low Transportation noise
Low Industrial noise
Low Ground vibration
Low Airblast overpressure
Low Low frequency
NA. Marine noise (underwater)
NA. Ecological impacts

Notes:

Extension of operations northward will bring mining activities closer in proximity to the town of Moranbah and the Moranbah Airport.

Noise assessment reports identified that there were two sensitive receptors that would be impacted by the proposed amendment where the applicant would not be able to comply with the noise limits specified in the CVM EA EPML00562013, under standard mitigation measures circumstances. It was predicted that in 2050 under adverse weather conditions, sensitive receptor R2 (881 Long Pocket Rd) and R7 (Skyville) would exceed the noise limits by 2dB and 1dB respectively. However, the application statesnt that has stated within the supporting document that although this exceedance is determined to be negligible, the CVM will implement additional mitigation measures will be implemented to reduce

unable to identify if the implementation measures will be sufficient to demonstrate, as per the existing EA condition, that there will not be a substantial change in the concentration of PM10 at sensitive or commercial places once all reasonable and practical measures have been taken or that mitigation and management measures are predicted to reduce PM10 concentrations to a level compliant with the Environmental Protection (Air) Policy 2019, when measured at sensitive or commercial places.

There have been ongoing discussions with the applicant who is aware that further information will be sought as part of the information request to address the concerns regarding the justification for and suitability of mitigation measures and strategies to effectively be able to meet the current conditions of the EA and levels detailed in -Environmental Protection (Air) Policy 2019.

Waste issues

NA. Solid waste
NA. Liquid waste
NA. Gaseous waste
NA. Dredge spoil disposal
NA. Energy
NA. Best practice environmental management
NA. Waste water
High Rock waste dumps
Low Non-acid forming and potentially acid forming material

Notes:

The Horse Pit Extension will increase the quantity of waste rock and coal rejects generated due to the expanded scale of operations. The additional waste rock will be disposed of within the in-pit waste rock dump and the proposed out of pit dump.

The applicant has assessed and stated that there is limited potential for acid mine drainage from operations relating to the project.

The applicant has stated that T the geological environment and geochemical characteristics are proposed to be consistent with that of between the existing Horse Pit and the proposed extension are consistent and T therefore current mitigation and

Commented [KE9]: Not sure if this is the correct word – like it sounds like their modelling was based on a leave of common/general site practises.

noise ~~levels emissions~~ at these sensitive ~~receptor locations~~ and will ensure compliance ~~CVM is compliant with their EA noise~~ conditions.

The noise mitigation and management strategies are deemed appropriate to reduce the noise impacts for sensitive receptors and ensure the applicant complies with current conditions of the EA. These strategies include:

- The progressive replacement of standard steel rollers with relatively quieter polymer rollers which is anticipated to result in a decrease in noise emissions by 5dB; and
- The installation of noise suppression kits on dozers working on the proposed out of pit dump;
- Design of the out of pit dump and operation of dozers on the out of pit dump.

The applicant's Noise and Vibration Impact Assessment stated that the Horse Pit extension is anticipated to comply with the current EA conditions regarding blasting or vibration impacts and therefore the current mitigation measures and management strategies will continue to ~~operate be implemented~~.

Land issues

High	Land disturbance
Low	Contaminated land
NA.	Acid sulfate soils
Low	Erosion/stability
NA.	Subsidence
Low	Landscape
Unknown	Effects on hydrology (surface and underground)
Low	Sustainable use
Low	Land use history and compatibility
Low	Areas of regional interest ⁸
NA.	Compliance with planning schemes
High	Rehabilitation and subsequent use
NA.	Native title rights
NA.	Rehabilitation issues (for existing activities)
Low	Non-acid forming and potentially acid forming material
High	Final voids
High	Progressive rehabilitation and closure plan

Notes:

An additional 910.71ha of disturbance is proposed to the current disturbance footprint of 6,306ha (as per the current ERC decision) resulting in an approximate 14% increase in surface area disturbance.

The proposed amendment has stated that a final void of 680ha will remain as the final landform design. The application provides conflicting information and it is not clear whether this final void will be able to sustain the stated post-mining land use of a useable water

management strategies of waste product are not expected to change.

The ~~only issue relates to the~~ necessity of an additional out of pit dump as opposed to increasing the backfilling of the existing pit ~~is unclear~~. As previously mentioned, this will be addressed in the information request ~~as to an options analysis. t.~~

Cultural and heritage issues

NA.	Aboriginal and Torres Strait Islander cultural sites
NA.	European cultural heritage significance (historic sites, buildings and locations)
NA.	Queensland heritage place (<i>Queensland Heritage Act 1992</i>)
NA.	Designated landscape area (<i>Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987</i>)
NA.	Native title rights

Notes:

None of the above matters are identified as being located within or in the immediate vicinity of the proposed Horse Pit Extension area. Therefore, there are likely to be no cultural and heritage issues.

*** Further information regarding Cultural Heritage can be addressed in the Information Request?**

⁸ <https://planning.dsdmip.qld.gov.au/planning/regional-planning-interests-act/areas-of-regional-interest>

storage or biologically viable water resource or if the final void will result in the stated non-use management area (NUMA). If the void is left as a NUMA, this would result in up to 680ha of land lost as a future productive resource.

The assessing officer is not satisfied that there is currently sufficient information justifying the appropriateness of the final void ~~for either of the post-mining land uses or as a non-use management area~~. Further information will be sought during the information request as to an options analysis for the void outcomes and the ability for rehabilitation activities to occur in the voids proposed final location (close to the tenure boundaries of ML1775).

The Caval Ridge Mine progressive rehabilitation and closure plan is due to be submitted on 1 December 2022. This date may conflict with the current EA amendment assessment.

Commented [KE10]: Double check

Impacts on surrounds and transport

Low Transportation (air, rail, road, port, shipping)

NA. Visual impacts

Medium Compatibility with surrounding uses, activities and land users

NA. Adjacent landholders

Medium Amenity

Medium Community & landholder views

NA. Lighting

Notes:

The proposed amendment will extend the current Caval Ridge Mine by approximately 30 years ensuring jobs for the local communities and utilising existing roads and transportation requirements. Caval Ridge Mine is already located in close proximity to the town of Moranbah and the Moranbah airport with the proposed extension bringing the mine even closer.

It is uncertain at this point whether there will be any issues of the proposed project on the public safety (or perception of public safety) of air travel particularly in regard to the closer proximity of the Horse Pit to the airport and consequently the impacts from air quality, lighting impacts and the reduction in land availability. These potential issues will be addressed in the information request to ensure public safety.

Social issues

Low Accommodation

Low Transport of workers

NA. Fly-in/fly-out (*Strong and Sustainable Resource Communities Act 2017*)

NA. Drive-in/drive-out (*Strong and Sustainable Resource Communities Act 2017*)

NA. Displacement of use

Medium Public safety

NA. Politics/policy

Medium Compatibility with surrounding uses, activities and land users

Notes:

The proposed Horse Pit Extension will ensure the current workforce of employees, contractors and local businesses reliant on the operation of the Caval Ridge Mine continue to have work available for an additional ~30 years.

It is not anticipated that the extension of the life of mine at Caval Ridge will

Commented [KE11]: I wait with anticipation ☺

PART B – TRIGGER CRITERIA

An EIS will be required if any of the following trigger criteria are met. If no criteria are triggered, this does not provide an exemption from having to prepare an EIS if the administering authority for the department considers that there may be a significant environmental impact, or there is a high level of uncertainty about the possible impacts, or there is a high level of public interest in the proposal.

For each question, indicate whether the answer is 'yes' or 'no':

Criteria	Yes	No
For greenfield (new) mine proposals (sections 70 or 143 of the EP Act)		
1. Would the application involve the removal of two million tonnes per year or more of run-of-mine (ROM) ⁹ ore or coal?	☐	☒
2. Would the application involve the removal of one million tonnes per year or more of run-of-mine (ROM) ore or coal on or under a floodplain ¹⁰ or in a coastal hazard area ¹¹ ?	☐	☒
3. Would the application involve the introduction of a novel or unproven resource extraction process, technology or activity ¹² ?	☐	☒
For proposals to amend/alter an existing mine (sections 143 and 228 of the EP Act)		
4. For mines already removing 2 – 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 100% or 5 million tonnes per year (whichever is the lesser)?	☐	☒
5. For mines already removing over 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 50% or 10 million tonnes per year (whichever is the lesser)?	☐	☒
6. For mines already removing more than 20 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 25%?	☐	☒
7. Would the application involve an extension into and significant impact on a Category A or B environmentally sensitive area, which is not already authorised by the State?	☒	☒
8. Would the application involve a substantial change in mining operations – such as from underground to open cut, or (for underground mining) a change in operations from one causing little subsidence to one likely to cause substantial subsidence?	☐	☒
9. Would the application introduce a novel or unproven resource removal process, technology or activity?	☐	☒
For petroleum and gas activities (sections 70, 143 and 228 of the EP Act)		

Commented [KE12]: Please confirm

⁹ ROM ore or coal means the material excavated but prior to washing or chemical concentration. It does not include overburden.

¹⁰ The *Water Act 2000* defines a floodplain as an area of reasonably flat land adjacent to a watercourse that— (a) is covered from time to time by floodwater overflowing from the watercourse; and (b) does not, other than in an upper valley reach, confine floodwater to generally follow the path of the watercourse; and (c) has finer sediment deposits than the sediment deposits of any bench, bar or in-stream island in the watercourse. See also the Queensland Floodplain Assessment Overlay at the *Wetland Info* section of the department's website at <https://wetlandinfo.des.qld.gov.au/wetlands/>.

¹¹ A coastal hazard area is an area vulnerable to coastal hazards, referred to as coastal erosion or storm tide inundation (as per the departmental coastal hazard area mapping). Maps of these areas are accessible at http://www.des.qld.gov.au/coastal/management/coastal_plan_maps.php and <http://qldspatialinformation.qld.gov.au/catalogue/custom/index.page>.

¹² For example: underground coal gasification; in-seam coal slurring; a new method of ore concentration; but this will be decided on a case-by-case basis and this trigger is not intended to discourage innovation.

10. Would the application involve a total disturbance area of greater than 2000 hectares at any one time during the life of the proposed project? This includes areas occupied by well pads (single or multi-directional), access tracks and roads, water storages, and process plants?	☐	☒
11. Would the application involve the construction of a high pressure pipeline over a distance of 300 kilometre or greater?	☐	☒
12. Would the application involve the construction of a liquefied natural gas plant?	☐	☒
General considerations		
Where needed, make comments on the rating of the application against the trigger criteria.		
<p>The proposed project is anticipated to impact Category B ESAs, however it is not anticipated that the impact will be significant.</p> <p>the impact is proposed to be offset.</p> <p>The proposed amendment does not relate to a new greenfield mine proposal or to petroleum and gas activities, therefore these triggers are not applicable. The Caval Ridge Mine already removes over 10 million tonnes of ROM ore or coal and the current application does not increase the current annual ROM or production removal rate by more than 50% or 10 million tonnes per year. Therefore, the application to amend EA EPML00562013 does not trigger any of the above criteria for an amendment to an existing mine.</p>		

Commented [KE13]: Confirm if it is proposed to be offset. And advise if the impact principles of avoid and minimise have been undertaken.

PART C – STANDARD CRITERIA

The standard criteria have to be considered in making the EIS decision. Provide comments on the standard criteria as defined under schedule 4 of the EP Act (where relevant):

Standard criteria, EP Act, schedule 4, definitions (current as at 1 January 2018)¹³:

Standard criteria	Comment
Standard criteria means –	
(a) the following principles of environmental policy as set out in the Intergovernmental Agreement on the Environment— (i) the precautionary principle ; (ii) intergenerational equity ; (iii) conservation of biological diversity and ecological integrity ; and	<p>The assessing officer has considered the precautionary principle, intergenerational equity and conservation of biological diversity and ecological integrity.</p> <p>The assessing officer is satisfied that the proposed amendment will not introduce any novel or untested methodologies. Further, any threats of serious or irreversible environmental harm are able to be evaluated in the assessment of this application and <u>indicated in the application to be able to be</u> subsequently managed by the applicant.</p> <p>The assessing officer is currently not satisfied that the proposed amendment will not deleteriously affect the health, diversity, and productivity of the environment for future generations. The amendment lacks details regarding:</p> <ul style="list-style-type: none"> • The applicant's ability to appropriately manage and mitigate air quality emissions; • Sufficient justification as to the necessity of an out of pit dump instead of backfilling the current Horse Pit; • Sufficient justification as to the extent of the final void; • The ability of the final void to sustain a post-mining use; and • If the final void is to remain as a non-use management area, the applicant has not provided additional studies and options to reduce the extent and consequently ensure more land is available for the use by future generations. <p>Although the assessing officer is not satisfied with the aforementioned aspects, these concerns <u>are able to be sought via will be addressed in</u> an information request.</p> <p>The assessing officer is satisfied that the proposed amendment will not compromise biodiversity or ecological integrity. The majority of the land, the subject of the amendment application, has historically been cleared of vegetation for agricultural purposes and includes only minimal <u>areas of</u> remnant</p>

Commented [KE14]: This is a well explained section and explanation of concerns for future generations.

¹³ Check standard criteria against latest version of the EP Act and amend if required
<https://www.legislation.qld.gov.au/view/html/inforce/current/act-1994-062>

	vegetation. Furthermore, significant residual impacts to MNES and MSES areas will require offsets prior to any disturbance to these areas.
(b) any Commonwealth or State government plans, standards, agreements or requirements about environmental protection or ecologically sustainable development; and	The assessing officer has considered the <i>Environmental Protection Act 1994</i> (EP Act), its subordinate legislation, the <i>Environmental Protection Regulation 2019</i> (EP Reg) and additional supporting policies.
(d) any relevant environmental impact study, assessment or report ; and	The assessing officer has considered all technical assessments and supporting information provided with the application.
(e) the character, resilience and values of the receiving environment; and	The assessing officer has considered the character, resilience and values of the receiving environment based on the information provided by the applicant within the application form and supporting information. Further, aside for air quality and the final void landform design (which will be able to be addressed in the information request), the application's proposed management actions to maintain the character, resilience and values of the receiving environment, are likely to be sufficient, when combined with appropriate conditioning in EA EPML00562013.
(f) all submissions made by the applicant and submitters; and	The assessing officer has considered all application material submitted by the applicant. The application has triggered public notification under section 230 of the EP Act and therefore any submissions made against the amendment application to the administering authority within the submission period can will be considered during the decision stage.
(g) the best practice environmental management for activities under any relevant instrument, or proposed instrument, as follows— (i) an environmental authority; (ii) a transitional environmental program; (iii) an environmental protection order; (iv) a disposal permit; (v) a development approval; and	The assessing officer has considered the best practice environmental management for the proposed activities. The appropriate regulatory instrument is the EA EPML00562013, and management plans required by the EA. There are no relevant transitional environmental programs, environmental protection order, disposal permit or development approval relevant to the EA or this application.
(h) the financial implications of the requirements under an instrument, or proposed instrument, mentioned in paragraph (g) as they would relate to the type of activity or industry carried out, or proposed to be carried out, under the instrument; and	The assessing officer has considered the financial implications. It can be reasonably expected that the applicant, who initiated the amendment application, has considered any additional financial costs resulting from the extension to the project, and any resulting cost of continuing compliance with changes to the EA conditions of the EA. Therefore, any financial implications are can reasonably be considered to be within the applicant's means to pay.
(i) the public interest ; and	The assessing officer has considered the public interest of the proposed amendment. As the project is located in close proximity to multiple sensitive receptors including the town of Moranbah and the Moranbah Airport, there is potential for public interest.

	<p>The proposed amendment is subject to public notification in which time, the public will have the opportunity to make submissions.</p> <p>Additionally, with regards to all decisions, human rights have been considered <u>at this stage of the assessment process. T and</u> there are no reasonably foreseeable limitations for human rights under the <i>Human Rights Act 2019</i> <u>for the assessment of the requirement for an EIS.</u></p>
(j) any relevant site management plan ; and	There are no relevant site management plans for the land that is subject of this application.
(k) any relevant integrated environmental management system or proposed integrated environmental management system; and	There is no relevant integrated environment management system or proposed integrated environmental management system applicable to the EA or this application.
(l) any other matter prescribed under a regulation.	There are no further matters prescribed under regulation (i.e. the EP Reg.) for consideration.
General considerations	
<p><i>Where needed, make comments on the rating of the application against the standard criteria.</i></p> <p>With consideration of the above comments, the proposed amendment application is reasonably expected to be compliant with the standard criteria as defined by Schedule 4 of the EP Act.</p>	

Date : 5/04/2022 10:43:05 AM

From : "Juliana McCosker"

To : "Luisa Taufatofua" Luisa.Taufatofua@des.qld.gov.au

Cc : "Kathryn Eller" Kathryn.Eller@des.qld.gov.au

Subject : RE: Caval Ridge Mine Horse Pit Extension CAC Report A-EA-AMD-100178679

Attachment : EA Amendment 20220405 CAC Report EPML00562013 BHP Coal Pty Ltd Caval Ridge Mine.pdf;image002.png;image003.png;image004.png;

Hi Luisa,

Please see attached to send to Kate and Chris via Pauline Gregory.

Ciao for now

Juliana



Queensland
Government

Juliana McCosker

Manager

Business Centre Coal - Coal and Central Queensland Compliance

Department of Environment and Science

Msch 4 - mobile phone

From: Luisa Taufatofua <Luisa.Taufatofua@des.qld.gov.au>

Sent: Tuesday, 5 April 2022 10:32 AM

To: Juliana McCosker

Cc: Kathryn Eller

Subject: Caval Ridge Mine Horse Pit Extension CAC Report A-EA-AMD-100178679

Importance: High

Hi Juliana,

Please find the Caval Ridge Mine Horse Pit Extension CAC Report for your review prior to sending it to Kate and Chris.

The document can be found here: <\\Mackay\groupdir\Environmental Services\MINING\MINES\3. ML's\Caval Ridge\Apps\2021\Horse Pit Expansion\CAC Report>

Let me know if there are any questions or comments.

Kind regards,



Queensland
Government

Luisa Taufatofua

Senior Environmental Officer

Business Centre (Coal) | Coal and Central Qld Compliance

Department of Environment and Science

P 07 4987 9342

99 Hospital Road, Emerald QLD 4720

PO Box 3028, Emerald QLD 4720

Coordinated assessment committee (CAC) report on the requirement for an environmental impact statement (EIS)

This internal report is for recommendations to the Department of Environment and Science CAC on whether an EIS is required for a project under sections 70, 73A, 143 and 228 of the Environmental Protection Act 1994 (EP Act).

When this report applies

The report format should be used for all resource applications meeting the requirements for a decision by CAC on whether an EIS is required under sections 70, 73C, 143 and 228 of the EP Act.

Specifically, this report should be used for:

- all site-specific resource applications for an environmental authority (EA) (s143 EP Act)
- applications that are major amendments to an EA (s228 EP Act)
- applications for voluntary preparation of an EIS (s70 EP Act)
- applications for: decisions on whether an EIS would be required for EA applications under s73A(1)(a) of the EP Act; and, if relevant, applications to prepare an EIS under s73A(1)(b) of the EP Act, if the chief executive decides an EIS would not be required for an EA application.

Note: this report is **not** for projects that have completed an EIS under the EP Act. It also does **not** apply to 'coordinated projects' under the *State Development and Public Works Organisation Act 1971*.

How to use this report format

This report should be prepared by the nominated assessment officer and should include a recommendation based on an assessment of:

- Part A (department interests)
- Part B (trigger criteria)
- Part C (standard criteria) of this CAC report.

Applications for major EA amendments should attach the assessment level decision (ALD decision) and supporting documentation, such as maps, to this CAC report. The CAC report must be approved and signed by the manager.

The completed CAC report should then be forwarded to Environmental Impact Assessment Team at eis@des.qld.gov.au, carbon copy (cc) to Pauline.Gregory@des.qld.gov.au and Chris.Loveday@des.qld.gov.au.

Applicant and project details

Project name	Caval Ridge Horse Pit Extension
Applicant name ¹	BHP Coal Pty Ltd
Project type	Mining black coal
Tenure details	ML70403; ML1775; ML70462
Project location	Caval Ridge Mine is located 7km south of Moranbah. The proposed Horse Pit Extension located towards the north west of the site.

Administrative details

Application type	Major amendment of a site-specific environmental authority.
Environmental authority no. (if relevant)	EPML00562013
eDOCS reference	101/0000190
Department business centre	Business Centre Coal
EIS decision due (max 3 bd after CAC report) ²	11 April 2022 (*20BD from payment of major fee and 10BD extension)
Information request due (section 140 EP Act)	11 April 2022 (*20BD from payment of major fee and 10BD extension)

¹ The 'applicant' is the persons, or registered legal entity (not a business trading name) intending to carry out the activity and in whose name the applicable permits or licences are to be issued.

² The EIS decision is due three business days (3 bd) after the CAC report is provided to CAC.

Recommendation³

After completing Parts A, B and C of this report, mark which of the following applies:

(a) EIS is required.....☐

(b) No EIS is required.....☒

Statement of reasons:

The assessing officer recommends that an EIS is not required for the major amendment regarding environmental authority EPML00562013. The major amendment application relates to the extension of the existing Horse Pit to the north east of Caval Ridge Mine, located on mining lease (ML) 1775, ML70403 and ML70462. The application, lodged 15 December 2021 by the principal applicant BHP Coal Pty Ltd, has been assessed against the 'EIS criteria for resource projects' (EIS criteria) as per section 3 of the Department's Guideline – 'Criteria for environmental impact statements for resource projects under the environmental Protection Act 1994' (ESR/2016/2167) (EIS Guideline).

The assessing officer has considered the EIS criteria through reference to the application documents, the EIS guideline and the information contained within this report. As a result, the assessing officer has taken into account the following:

- the 'standard criteria' as per Schedule 4 of the *Environmental Protection Act 1994* (EP Act);
- the trigger criteria as per the EIS triggers for proposals to amend/alter an existing mine;
- the relative magnitude of the project with regards to its scale and risk of impacts to environmental values;
- the public interest with regards to the amendment and its impacts;
- any uncertainties with regards to possible impacts;
- any significant issues to be addressed by other Queensland Government or Commonwealth Government authorities;
- the social and economic impacts; and
- any cumulative impacts.

Further, the assessing officer is satisfied that any issues concerning the above can and will be resolved, without the need for an EIS.

Assessing officer: Luisa Taufatofua

Date: 5/04/2022

Delegate (EP Act): Juliana McCosker

Date: 5/04/2022

³ In making this recommendation, the department's guideline *Criteria for environmental impact statements for resource projects under the Environmental Protection Act 1994* (ESR/2016/2167) assists the administering authority to carry out its functions and responsibilities in accordance with the EP Act. This includes empowerment of the right to require an EIS for a resource development project if consideration of the standard criteria (and any other relevant considerations) shows an EIS should be required, irrespective of the triggers in this guideline.

PART A – DES INTERESTS

Additional approval processes required (attach details where necessary):

- ☐ None
- ☐ Other applications received by the department for project
- ☐ A process under the *State Development and Public Works Organisation Act 1971*
- ☒ Commonwealth processes under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- ☐ Other

The applicant has also submitted an application for approval under the EPBC Act which is currently under review. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Special considerations (attach details where necessary):

- ☒ Affects an environmentally sensitive area (Category A, B and/or C⁴)
- ☐ Involves a large number of individual decisions
- ☒ Is likely to generate significant community concern
- ☐ Needs policy change for approval
- ☐ Applicant suitability⁵
- ☐ Involves significant issues with another Queensland Government/Australian Government authority
- ☐ Involves impacts on an existing legally secured offset area under State and/or Commonwealth legislation
- ☐ Another special circumstance which significantly elevates environmental, social or economic risks beyond those usual for this type of project
- ☐ Other

According to the Queensland Government ESA – Mining Activities mapping tool, the proposed project is anticipated to impact Category B ESAs. However, this was ground-truthed by the applicant and the regrowth vegetation present in this area does not meet the definitions under the *Offsets Act* 2014 and therefore offsets will not be required.

The amendment is likely to generate significant community concern due to three primary factors:

1. The proposed Horse Pit Extension will bring mining activities within closer proximity to multiple sensitive receptors, specifically it will be located right next to the Moranbah airport and in close proximity to the town of Moranbah and other surrounding homesteads to the north.
2. Furthermore, the potential for air quality impacts to sensitive receptors, particularly at the Moranbah Airport or town of Moranbah, is anticipated to increase significantly which could have issues to the health and wellbeing of sensitive receptors and the general public accessing these areas.
3. The amendment proposes for a final void of 680ha to remain following the closure of the mine. It is not clear whether this void will be able to sustain a post-mining land use or whether

⁴ Refer to guideline ESR/2016/1985: 'Eligibility criteria and standard conditions for exploration and mineral development projects'

⁵ Refer to guideline ESR/2015/1771: 'Application to be a registered suitable operator'.

it will result in a non-use management area located in close proximity to the Moranbah airport, town of Moranbah and the adjoining highway.

On the other hand, the proposed project is anticipated to have numerous community benefits including the ongoing provision of jobs to those currently employed at Caval Ridge and localised benefits to the town of Moranbah.

Pre-lodgement advice

Provide information on date, who and what advice was given during the pre-lodgement meeting.

20 October 2020: A Technical Workshop 1 was held between DES, BHP (applicant) and SLR (Consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focussed on air quality, noise, land and geochemistry.

- Air quality: No questions from DES.
- Noise and Vibration: DES queried how old the data proposed to be used for cumulative impact assessments was.
- Land: DES queried the depth of topsoil and stated that DES will be looking very closely at topsoil management going forward.
- Geochemistry: No questions from DES.

21 October 2020: A Technical Workshop 2 was held between DES, DAWE and BHP (applicant) and SLR (consultant) to discuss the Horse Pit Extension Project. In particular, the workshop focused on terrestrial ecology, GDEs, Groundwater and Surface Water.

- Terrestrial Ecology: DES had queries around Horse Creek, herbarium mapping and that offset may be required.
- Groundwater: DES had queries around mapping and details of proposed bores.
- GDEs: DES reiterated that it is not DES's role to comment on the methodology of the assessments but to assess the assessment. DES also expressed those reports, documents and technical information would need to be provided prior to DES providing any detailed feedback.
- Surface Water: DES queried any interactions between pit flows and surface water flows to Horse Creek which SLR consulting confirmed there would be no interactions.

19 August 2021: A pre-lodgement meeting was held between DES and BHP to discuss the Caval Ridge Horse Pit Extension Project. At this meeting a site visit was organised to be held on 28 August 2021.

28 August 2021: A site visit was undertaken to Caval Ridge.

Other issues

Provide information on any other issue not covered in this CAC report.

The application was submitted on 15 December 2021 and on 17 January 2022, it was determined that the amendment be a major amendment requiring public notification. The project was deemed to be likely to be a substantial increase in the risk of environmental harm and the risk is the result of a substantial change in the results of the release of a quantity or quality of a contaminant permitted to be released into the environment. This was triggered due to the significant increase in the air quality impacts predicted from the study particularly around dust and PM10 emissions. The air quality technical report provided with the application did not provide sufficient justification that the applicant would be able to reduce the air quality impacts to below the 10% trigger limit. On 18 January 2022 and 10 February 2022, the Department had a meeting with the applicants to discuss the issues

regarding the air quality impacts. The applicant advised that they would be providing updated technical reports to demonstrate how Caval Ridge will be able to reduce the air quality impacts and comply with the conditions of the EA. Such was to be provided following withdrawal of the application and subsequent resubmission. The applicant decided to progress with the application including public notification instead.

Published on DESI Disclosure Log
RTI Act 2009

DES interests

If an impact is indicated, provide information on the level and significance of the impact on the matter

Amendment Description

The applicant proposes to extend an existing northern mine pit, named Horse Pit. This will result in a revised life of mine from 2026 to 2056, adding 30 years to the operation to that of existing approvals. The Horse Pit Extension Project proposes an additional 910.71 ha of disturbance and will include:

- The extension of the Horse Pit (655.65 ha in the north east of ML 1775);
- The addition of an out of pit dump (107.31 ha) in the northwest of ML 70403;
- The relocation of existing infrastructure located within the proposed Horse Pit extension site including the EME Build Pad, blasting compound with two potential relocation options, back access roads, substations, go-lines and powerlines;
- The construction of two additional regulated flood levees to protect the proposed project area from potential flood events (up to 0.1% Annual Exceedance Probability (AEP)).
- The northern (Horse Pit North) levee will be approximately 1.4km in length and bounds a portion of Horse Pit in the north of the proposed pit; and
- The western (Horse Pit West) levee will be approximately 400m in length and located within the south west extent of the proposed out of pit dump.
- The construction of a bridge over Horse Creek and the extension of the haul road to the north west of ML 70403 to access the proposed out of pit dump
- The construction of sediment dams as well as both clean water and MAW diversion drains to manage runoff from the proposed out of pit dump (OOPD);
- The relocation of the Peak Downs Highway dragline crossing; and
- A Post-closure rehabilitated final landform with a single final void of approximately 680ha in the far east of ML1775.

CVM Justification for the proposed amendment

The Project proposes to extend the footprint of the existing Horse Pit at the CVM scheduled to reach the limit of the approved Horse Pit extent during Financial Year (FY) 2025, with some existing site infrastructure potentially being relocated from 2023. If approved, the extension is projected to extend the mine's life from the 2030s to the 2050s, protecting jobs and royalties into the future.

Significant mine engineering design has been undertaken to accommodate for the Project, which will utilise existing CVM infrastructure for coal processing, tailings disposal and rail loadout of product coal, amongst other things. The Project facilitates an opportunity to further contribute to Australia's position as a primary global producer of high-quality coking coal products. The Project will extract otherwise under-utilised resources from an area already disturbed by previous land uses which provides benefits over establishing a mine at a greenfield site. The extension of the mine life at CVM will also see further economic benefits to local and regional communities. Activities associated with the Project are not expected to cause environmental harm to any nearby sensitive receptors such as residential housing and/or local businesses. However, mitigation measures will be implemented to prevent or minimise negative impacts on surrounding environmental values.

Other Matters

The applicant has provided an EIS Trigger Assessment in the 'EA Amendment Supporting Information' (refer Table 2-2 and Table 2-3) in which they have stated that no EIS triggers are relevant to the Project. The applicant has also stated that they anticipate that the ERAs listed on the current EA EPML00562013 will remain the same.

Matters of state environmental significance (MSES⁶) and related matters

Medium Regulated vegetation:

- endangered and of concern regional ecosystems (REs)
- REs that intersect with a watercourse on Vegetation management (VM) watercourse map
- REs that intersect with a wetland on a VM wetland map
- REs that are also essential habitat for endangered and vulnerable species

Medium Connectivity areas

NA. Wetlands: wetland protection areas, high ecological significance wetlands, high ecological value wetlands and waterways

NA. Strategic environmental area

High Protected wildlife habitat:

- endangered and vulnerable protected flora
- Three types of koala habitat: bushland koala habitat, medium value rehabilitation habitat and high value rehabilitation habitat (SEQ)
- habitat for animal that is endangered, vulnerable or special least concern

NA. Protected areas part of State Forest under the Forestry Act 1959

NA. Highly protected marine park zones

NA. Fish habitat areas

NA. Watercourse providing for fish passage

NA. Marine plants

NA. Legally secured offset areas

Notes:

The Project is likely to have a significant residual impact on matters of state environmental significance (MSES) on 4 key areas:

1. Regulated vegetation – 23.4ha
2. Connectivity – 84.19ha
3. King bluegrass – 23.4ha
4. Ornamental snake – 167.84ha

Regulated Vegetation: The project area has identified 31.44ha of 'Of Concern' RE 11.8.11 which is king bluegrass (*Dichanthium sericeum*) with 23.4ha proposed to have a significant residual impact.

Connectivity Areas: The project has identified 84.19ha of connectivity area which was ground-truthed by the applicant as remnant REs. This comprises of RE 11.8.11 and 11.7.1 The Terrestrial Ecology Report identified 112.4ha of remnant vegetation.

Note: Where there is reference throughout this report to the applicant ground-truthing data, this will be addressed with the Queensland Herbarium while awaiting a response to the Information request to

Other

High Endangered, vulnerable and special least concern species (NC Act)⁷

Low Environmentally sensitive areas A, B and C

NA. Vegetation clearing

Medium Terrestrial ecology

NA. Groundwater-dependent ecosystems

Notes:

According to the Queensland Government ESA – Mining Activities mapping tool, the proposed amendment will impact on approximately 60.52ha of RE 11.7.1 which has a biodiversity status of 'Of Concern' so is a Category B Environmentally Sensitive Area, however under the Vegetation Management Act has a class of 'Least Concern' making it not a prescribed environmental matter under the *Environmental Offsets Act 2014*.

According to the Terrestrial Ecology Assessment provided with the application, the disturbance footprint was ground-truthed to confirm the presence of the following endangered REs:

- Endangered HVR RE 11.3.1: ~0.09ha
- Endangered regrowth RE 11.4.8: ~0.14ha
- Endangered regrowth RE 11.4.9: ~497.88ha

The listed ESAs are not categorised as MSES areas and therefore the applicant does not anticipate that an environmental offset is required.

Matters of national environmental significance (MNES)

High Listed threatened species and ecological communities under the EPBC Act

NA. Great Barrier Reef Marine Park

NA. Wetlands of International importance

NA. Migratory species (international agreements)

NA. World Heritage Properties

NA. National Heritage places

NA. Commonwealth marine areas

NA. Nuclear actions

High A water resource in relation to CSG and large coal mining developments (IESC)

Notes:

There are three EPBC Act listed threatened species (one flora species and two fauna species) which have been identified in the disturbance footprint of the project as known or likely to occur within the area, this includes:

- King bluegrass: 23.4ha;

⁶ For definitions of MSES refer to schedule 2 of the Environmental Offsets Regulation 2014.

⁷ NC Act – *Nature Conservation Act 1992*

ensure this has been formally assessed through the herbarium and there is evidence of the approval.

Protected Wildlife Habitat: The application states that there are a number of areas relating to six species with protected wildlife habitat which will be impacted by the project. This includes the following:

- Known to occur:
 - King bluegrass (vulnerable): 23.4ha;
 - Ornamental snake (vulnerable): 167.84ha (preferred habitat);
 - Squatter Pigeon (vulnerable): 54.82ha (preferred habitat) and 28.71ha (suitable)
- Likely/potential to occur:
 - Common death adder (vulnerable): 80.47ha;
 - Australian painted snipe (vulnerable): 1.8ha;
 - Short-beaked echidna (special least concern): 595.03ha

The applicant has indicated that there will likely be a significant residual impact on king bluegrass and ornamental snake habitat, however this is also a EPBC Act listed threatened species so will be managed under the EPBC Act assessment process. Furthermore, the applicant has indicated a significant residual impact to squatter pigeon and the Australian painted snipe are not anticipated, and as this constitutes an MNES impact it will be assessed under the EPBC Act.

Coastal issues

- | | |
|-----|--|
| NA. | Coastal hazard (erosion, storm tide inundation) |
| NA. | Structures (jetties, pontoons, seawalls) |
| NA. | Reclamation |
| NA. | Port development |
| NA. | Dredging and spoil disposal |
| NA. | Quarry material extraction from tidal water |
| NA. | Artificial waterways (canal estates, lakes) |
| NA. | Impacts on marine systems |
| NA. | Coastal resources (natural and physical features such as beaches, dunes, wetlands; processes and landforms; vegetation, wildlife etc.) |
| NA. | Public access to coastal and marine resources |

Notes:

None of the above matters are identified to be located within or in the immediate vicinity of the proposed Horse Pit Extension. Therefore, coastal issues are unlikely.

- Ornamental snake: 167.84ha (preferred habitat); and
- Squatter pigeon: 54.82ha (preferred habitat) and 28.71 (suitable habitat).

The Australian painted snipe (1.8ha) also has the potential to occur with intermittent foraging habitat recorded.

It is anticipated that there will be a significant residual impact to MNES areas (king bluegrass and ornamental snake). The CVM proposed amendment has already been submitted to the Federal Government Environment Minister or a delegate for formal assessment and approval. On 19 November 2021, the project was determined a 'Controlled Action', requiring assessment via 'Preliminary Documentation' for the following controlling provisions:

- Listed threatened species and communities; and
- A water resource, in relation to coal seam gas development and large coal mining development.

Tenure issues

- | | |
|-----|--|
| NA. | Protected areas |
| NA. | Native title interests |
| NA. | Offshore jurisdiction |
| NA. | Commonwealth jurisdiction |
| NA. | Interstate jurisdiction |
| NA. | Legally secured offset area |
| NA. | Occupancy of unallocated state land under tidal waters |

Notes:

The Horse Pit Extension will require the grant of two additional surface area rights by the Department of Resources. An application has been lodged by the applicant to the Department of Resources and therefore the public notification of the Horse Pit Extension will be conducted as a coordinated approach by the Department of Resources.

The joint holders of EA EPML00562013 currently hold the underlying tenures. Therefore it is not anticipated that tenure issues are likely.

Resource allocation

Low	Mining
NA.	Gas / Petroleum
NA.	Quarry material allocation under the CPM Act (quarry material extraction from below tidal water)
Low	Water allocation
NA.	Occupancy of fish habitat area (resource allocation under the Fisheries Act)
NA.	Commercial opportunities on national parks and marine parks
Low	Allocation of public resources (e.g. physical and natural resources environmental capacity)

Notes:

The proposed amendment is not anticipated to significantly increase the intensity of the relevant activity beyond what is currently approved with no change in the rate of extraction. The application states that Caval Ridge mine will continue to produce up to 15 million tonnes per annum (Mtpa) of ROM coal. The EA does not specify a ROM or production rate. Caval Ridge Mine also processes ROM coal from Peak Downs onsite. This information is able to be sourced via an information request including the following:

- Production limits from both Caval Ridge Mine and Peak Downs Mine;
- The production of waste from each site as well as the volume of waste from Caval Ridge versus Peak Downs Mine that is disposed of at Caval Ridge.

There are no changes to the approved mining methods proposed and material characteristics of coal and overburden remain unchanged. The proposed amendment will result in an additional 910.7ha of disturbance to the current disturbance footprint of 6,306ha (current ERC decision) resulting in an approximate 14% increase in surface area disturbance. Additional information regarding the necessity of this amount of proposed disturbance particularly around the proposed out of pit dump can be sought in the information request.

Water issues

Low	Water quality
Low	Discharges
Low	Groundwater
Low	Surface water
Low	Hydrology
NA.	Diversions
Low	Cumulative impacts (e.g. groundwater)
Low	Impacts on stream flows (geomorphological)
NA.	Impacts on bank stability
Unknown	Waterways management
NA.	Impacts on freshwater systems
NA.	Regulated structures (e.g. dams)
NA.	Cumulative management areas under the <i>Water Act 2000</i>

Notes:

The applicant has stated that there is no anticipated increase in the demand for water and the current mine water system will maximise water re-use for dust suppression and coal processing. Additional water management infrastructure is being proposed as well as the relocation of dams currently located within the project site. However, it is not anticipated that there will be an increase in the need for mine affected water (MAW) dams. Any potential releases to surface waters are to comply with the conditions of the existing EA. There are no additional discharge points proposed and no change in release quality or quantity limits to surface waters.

Air issues

Low	Air shed management
High	Pollution
High	Health
High	Nuisance
NA.	Ecological impacts
NA.	Odour

Notes:

The proposed amendment triggered the requirement for public notification based on the risk associated with the project's air quality impacts. According to the application, the frequency of unmitigated dust emission exceedances is anticipated to increase as well as the predicted monthly average dust deposition over the life of mine at sensitive receptors located at Site 6 (Long Pocked Rd) and Site 8 (Moranbah Airport) as shown below:

- Site 6 (Long Pocket Rd west, DP6): An increase from 129 mg/m²/day to and above-objective level of 140 mg/m²/month which represents as 8% increase.
- Site 8 (Moranbah Airport, DP8): An increase from 115 mg/m²/day to and above-objective level of 138 mg/m²/month which represents as 20% increase.

Furthermore there is anticipated to be a significant increase in the operational risk for PM10 concentrations for most sensitive receptor locations located at Site 2 (Surrogate for Moranbah Township);

There are four minor ephemeral drainage lines within the proposed project site. The applicant has stated that these drainage lines do not require a diversion and therefore will be mined through as mining progresses. According to section 5(3) of the *Water Act 2000*, a watercourse does not include a drainage feature.

The proposed construction of the Horse Pit North levee and the Horse Pit West levee is modelled to achieve flood immunity of up to and including a 0.1% Annual Exceedance Probability (AEP) event. The construction of the levees and the Horse Pit Crossing for the haul trucks will occur during the dry season to minimise soil disturbance to the adjacent waterways and will be in line with the current Erosion and Sediment Control Plan.

Furthermore, in terms of surface water run-off, the applicant has stated that the proposed changes “are unlikely to cause changes to the flow regime that may result in impacts to downstream users or the environment”

Site 6 (Long Pocket Road) and Site 8 (Moranbah Airport) as shown below:

- Site 2 (Long Pocket Rd East, Surrogate for Moranbah Township, DP2): An increase from 50 $\mu\text{g}/\text{m}^3$ to 57 $\mu\text{g}/\text{m}^3$ which is a 14% increase above the objective listed in condition B6 of the EA;
- Site 6 (Long Pocket Rd west, DP6): An increase from 50 $\mu\text{g}/\text{m}^3$ to 52 $\mu\text{g}/\text{m}^3$ which is a 4% increase;
- Site 8 (Moranbah Airport, DP8): An increase from 65 $\mu\text{g}/\text{m}^3$ to 89 $\mu\text{g}/\text{m}^3$ which is a 37% increase. The difference from the objective listed in condition B6 of the EA is a 78% increase.

The application documents have not specified the revised predictions based on proposed mitigation and management measures. The assessing officer is unable to identify if the implementation measures will be sufficient to demonstrate, as per the existing EA condition, that there will not be a substantial change in the concentration of PM10 at sensitive or commercial places once all reasonable and practical measures have been taken or that mitigation and management measures are predicted to reduce PM10 concentrations to a level compliant with the Environmental Protection (Air) Policy 2019, when measured at sensitive or commercial places.

There have been ongoing discussions with the applicant who is aware that further information will be sought as part of the information request to address the concerns regarding the justification for and suitability of mitigation measures and strategies to effectively be able to meet the current conditions of the EA and levels detailed in Environmental Protection (Air) Policy 2019.

Noise and vibration issues

Low	Community noise
Low	Transportation noise
Low	Industrial noise
Low	Ground vibration
Low	Airblast overpressure
Low	Low frequency
NA.	Marine noise (underwater)
NA.	Ecological impacts

Notes:

Extension of operations northward will bring mining activities closer in proximity to the town of Moranbah and the Moranbah Airport.

Noise assessment reports identified that there were two sensitive receptors that would be impacted by the proposed amendment where the applicant would not be able to comply with the noise limits specified in the

Waste issues

NA.	Solid waste
NA.	Liquid waste
NA.	Gaseous waste
NA.	Dredge spoil disposal
NA.	Energy
NA.	Best practice environmental management
NA.	Waste water
High	Rock waste dumps
Low	Non-acid forming and potentially acid forming material

Notes:

The Horse Pit Extension will increase the quantity of waste rock and coal rejects generated. The additional waste rock will be disposed of within the in-pit waste rock dump and the proposed out of pit dump.

CVM EA EPML00562013, under standard mitigation measures circumstances. It was predicted that in 2050 under adverse weather conditions, sensitive receptor R2 (881 Long Pocket Rd) and R7 (Skyville) would exceed the noise limits by 2dB and 1dB respectively. However, the application states that additional mitigation measures will be implemented to reduce noise levels at these sensitive receptors and will ensure compliance with the EA conditions.

The additional noise mitigation and management strategies are deemed appropriate to reduce the noise impacts for sensitive receptors and ensure the applicant complies with current conditions of the EA. These strategies include:

- The progressive replacement of standard steel rollers with relatively quieter polymer rollers which is anticipated to result in a decrease in noise emissions by 5dB; and
- The installation of noise suppression kits on dozers working on the proposed out of pit dump;
- Design of the out of pit dump and operation of dozers on the out of pit dump.

The applicant's Noise and Vibration Impact Assessment stated that the Horse Pit extension is anticipated to comply with the current EA conditions regarding blasting or vibration impacts and therefore the current mitigation measures and management strategies will continue to be implemented.

However, it is important to note that the Noise and Vibration Impact Assessment did not consider impacts to the Moranbah Airport which the applicant does not consider as a sensitive or commercial receptor. This will be addressed in the information request.

Land issues

High	Land disturbance
Low	Contaminated land
NA.	Acid sulfate soils
Low	Erosion/stability
NA.	Subsidence
Low	Landscape
Unknown	Effects on hydrology (surface and underground)
Low	Sustainable use
Low	Land use history and compatibility
Low	Areas of regional interest ⁸
NA.	Compliance with planning schemes
High	Rehabilitation and subsequent use
NA.	Native title rights
NA.	Rehabilitation issues (for existing activities)
Low	Non-acid forming and potentially acid forming material

The applicant has stated that there is limited potential for acid mine drainage from the project. The geological environment and geochemical characteristics are proposed to be consistent with that of the existing Horse Pit. Therefore current mitigation and management strategies of waste product are not expected to change.

The necessity of an additional out of pit dump as opposed to increasing the backfilling of the existing pit is unclear. As previously mentioned, this will be addressed in the information request as to an options analysis.

Cultural and heritage issues

NA.	Aboriginal and Torres Strait Islander cultural sites
NA.	European cultural heritage significance (historic sites, buildings and locations)
NA.	Queensland heritage place (<i>Queensland Heritage Act 1992</i>)
NA.	Designated landscape area (<i>Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987</i>)
NA.	Native title rights

Notes:

None of the above matters are identified as being located within or in the immediate vicinity of the proposed Horse Pit Extension area. Therefore, there are likely to be no cultural and heritage issues.

⁸ <https://planning.dsdmip.qld.gov.au/planning/regional-planning-interests-act/areas-of-regional-interest>

High Final voids
High Progressive rehabilitation and closure plan

Notes:

An additional 910.71ha of disturbance is proposed to the current disturbance footprint of 6,306ha (as per the current ERC decision) resulting in an approximate 14% increase in surface area disturbance.

The proposed amendment has stated that a final void of 680ha will remain as the final landform design. The application provides conflicting information and it is not clear whether this final void will be able to sustain the stated post-mining land use of a useable water storage or biologically viable water resource or if the final void will result in the stated non-use management area (NUMA). If the void is left as a NUMA, this would result in up to 680ha of land lost as a future productive resource.

The assessing officer is not satisfied that there is currently sufficient information justifying the appropriateness of the final void. Further information will be sought during the information request as to an options analysis for the void outcomes and the ability for rehabilitation activities to occur in the voids proposed final location (close to the tenure boundaries of ML1775).

The Caval Ridge Mine progressive rehabilitation and closure plan is due to be submitted on 1 December 2022. This date may conflict with the current EA amendment assessment.

Impacts on surrounds and transport

Low Transportation (air, rail, road, port, shipping)
NA. Visual impacts
Medium Compatibility with surrounding uses, activities and land users
NA. Adjacent landholders
Medium Amenity
Medium Community & landholder views
NA. Lighting

Notes:

The proposed amendment will extend the current Caval Ridge Mine by approximately 30 years ensuring jobs for the local communities and utilising existing roads and transportation requirements. Caval Ridge Mine is already located in close proximity to the town of Moranbah and the Moranbah airport with the proposed extension bringing the mine even closer.

It is uncertain at this point whether there will be any issues of the proposed project on the public safety (or perception of public safety) of air travel particularly in regard to the closer proximity of the Horse Pit to the airport and consequently the impacts from air quality, lighting impacts and the reduction in land availability. These potential issues will be addressed in the information request to ensure public safety.

Social issues

Low Accommodation
Low Transport of workers
NA. Fly-in/fly-out (*Strong and Sustainable Resource Communities Act 2017*)
NA. Drive-in/drive-out (*Strong and Sustainable Resource Communities Act 2017*)
NA. Displacement of use
Medium Public safety
NA. Politics/policy
Medium Compatibility with surrounding uses, activities and land users

Notes:

The proposed Horse Pit Extension will ensure the current workforce of employees, contractors and local businesses reliant on the operation of the Caval Ridge Mine continue to have work available for an additional ~30 years.

It is not anticipated that the extension of the life of mine at Caval Ridge will significantly change from the current workforce.

It is uncertain at this point whether the currently proposed final design of the mine will raise further community concern regarding public safety, particularly as the proposed highwall would be located in closer proximity to the Peak Downs

highway and Moranbah Access Road, furthermore with the proximity of the mine to the town of Moranbah. These potential issues will be addressed in the information request to ensure public safety.

Published on DESI Disclosure Log
RTI Act 2009

PART B – TRIGGER CRITERIA

An EIS will be required if any of the following trigger criteria are met. If no criteria are triggered, this does not provide an exemption from having to prepare an EIS if the administering authority for the department considers that there may be a significant environmental impact, or there is a high level of uncertainty about the possible impacts, or there is a high level of public interest in the proposal.

For each question, indicate whether the answer is ‘yes’ or ‘no’:

Criteria	Yes	No
For greenfield (new) mine proposals (sections 70 or 143 of the EP Act)		
1. Would the application involve the removal of two million tonnes per year or more of run-of-mine (ROM) ⁹ ore or coal?	☐	☒
2. Would the application involve the removal of one million tonnes per year or more of run-of-mine (ROM) ore or coal on or under a floodplain ¹⁰ or in a coastal hazard area ¹¹ ?	☐	☒
3. Would the application involve the introduction of a novel or unproven resource extraction process, technology or activity ¹² ?	☐	☒
For proposals to amend/alter an existing mine (sections 143 and 228 of the EP Act)		
4. For mines already removing 2 – 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 100% or 5 million tonnes per year (whichever is the lesser)?	☐	☒
5. For mines already removing over 10 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 50% or 10 million tonnes per year (whichever is the lesser)?	☐	☒
6. For mines already removing more than 20 million tonnes per year ROM ore or coal, would the application increase the current annual removal rate by more than 25%?	☐	☒
7. Would the application involve an extension into and significant impact on a Category A or B environmentally sensitive area, which is not already authorised by the State?	☒	☐
8. Would the application involve a substantial change in mining operations – such as from underground to open cut, or (for underground mining) a change in operations from one causing little subsidence to one likely to cause substantial subsidence?	☐	☒
9. Would the application introduce a novel or unproven resource removal process, technology or activity?	☐	☒
For petroleum and gas activities (sections 70, 143 and 228 of the EP Act)		

⁹ ROM ore or coal means the material excavated but prior to washing or chemical concentration. It does not include overburden.

¹⁰ The *Water Act 2000* defines a floodplain as an area of reasonably flat land adjacent to a watercourse that— (a) is covered from time to time by floodwater overflowing from the watercourse; and (b) does not, other than in an upper valley reach, confine floodwater to generally follow the path of the watercourse; and (c) has finer sediment deposits than the sediment deposits of any bench, bar or in-stream island in the watercourse. See also the Queensland Floodplain Assessment Overlay at the *Wetland Info* section of the department's website at <https://wetlandinfo.des.qld.gov.au/wetlands/>.

¹¹ A coastal hazard area is an area vulnerable to coastal hazards, referred to as coastal erosion or storm tide inundation (as per the departmental coastal hazard area mapping). Maps of these areas are accessible at http://www.des.qld.gov.au/coastal/management/coastal_plan_maps.php and <http://qldspatial.information.qld.gov.au/catalogue/custom/index.page>.

¹² For example: underground coal gasification; in-seam coal slurring; a new method of ore concentration; but this will be decided on a case-by-case basis and this trigger is not intended to discourage innovation.

10. Would the application involve a total disturbance area of greater than 2000 hectares at any one time during the life of the proposed project? This includes areas occupied by well pads (single or multi-directional), access tracks and roads, water storages, and process plants?	☐	☒
11. Would the application involve the construction of a high pressure pipeline over a distance of 300 kilometre or greater?	☐	☒
12. Would the application involve the construction of a liquefied natural gas plant?	☐	☒
General considerations		
<p><i>Where needed, make comments on the rating of the application against the trigger criteria.</i></p> <p>According to the Queensland Government ESA – Mining Activities mapping tool, the proposed project is anticipated to impact Category B ESAs. However, this was ground-truthed by the applicant and the regrowth vegetation present in this area does not meet the definitions under the <i>Offsets Act 2014</i> and therefore offsets will not be required.</p> <p>The proposed amendment does not relate to a new greenfield mine proposal or to petroleum and gas activities, therefore these triggers are not applicable. The Caval Ridge Mine already removes over 10 million tonnes of ROM ore or coal and the current application does not increase the current annual ROM or production rate by more than 50% or 10 million tonnes per year. Therefore, the application to amend EA EPML00562013 does not trigger any of the above criteria for an amendment to an existing mine.</p>		

PART C – STANDARD CRITERIA

The standard criteria have to be considered in making the EIS decision. Provide comments on the standard criteria as defined under schedule 4 of the EP Act (where relevant):

Standard criteria, EP Act, schedule 4, definitions (current as at 1 January 2018)¹³:

Standard criteria	Comment
Standard criteria means –	
<p>(a) the following principles of environmental policy as set out in the Intergovernmental Agreement on the Environment—</p> <ul style="list-style-type: none"> (i) the precautionary principle; (ii) intergenerational equity; (iii) conservation of biological diversity and ecological integrity; and 	<p>The assessing officer has considered the precautionary principle, intergenerational equity and conservation of biological diversity and ecological integrity.</p> <p>The assessing officer is satisfied that the proposed amendment will not introduce any novel or untested methodologies. Further, any threats of serious or irreversible environmental harm are able to be evaluated in the assessment of this application and indicated in the application to be able to be subsequently managed by the applicant.</p> <p>The assessing officer is currently not satisfied that the proposed amendment will not deleteriously affect the health, diversity, and productivity of the environment for future generations. The amendment lacks details regarding:</p> <ul style="list-style-type: none"> • The applicant's ability to appropriately manage and mitigate air quality emissions; • Sufficient justification as to the necessity of an out of pit dump instead of backfilling the current Horse Pit; • Sufficient justification as to the extent of the final void; • The ability of the final void to sustain a post-mining use; and • If the final void is to remain as a non-use management area, the applicant has not provided additional studies and options to reduce the extent and consequently ensure more land is available for the use by future generations. <p>Although the assessing officer is not satisfied with the aforementioned aspects, these concerns are able to be sought via an information request.</p> <p>The assessing officer is satisfied that the proposed amendment will not compromise biodiversity or ecological integrity. The majority of the land, the subject of the amendment application, has historically been cleared of vegetation for agricultural purposes and includes only minimal areas of remnant vegetation. Furthermore, significant residual impacts</p>

¹³ Check standard criteria against latest version of the EP Act and amend if required
<https://www.legislation.qld.gov.au/view/html/inforce/current/act-1994-062>

	to MNES and MSES areas will require offsets prior to any disturbance to these areas.
(b) any Commonwealth or State government plans, standards, agreements or requirements about environmental protection or ecologically sustainable development; and	The assessing officer has considered the <i>Environmental Protection Act 1994</i> (EP Act), its subordinate legislation, the <i>Environmental Protection Regulation 2019</i> (EP Reg) and additional supporting policies.
(d) any relevant environmental impact study, assessment or report ; and	The assessing officer has considered all technical assessments and supporting information provided with the application.
(e) the character, resilience and values of the receiving environment; and	The assessing officer has considered the character, resilience and values of the receiving environment based on the information provided by the applicant within the application form and supporting information. Further, aside for air quality and the final void landform design (which are able to be addressed in the information request), the application's proposed management actions to maintain the character, resilience and values of the receiving environment, are likely to be sufficient, when combined with appropriate conditioning in EA EPML00562013.
(f) all submissions made by the applicant and submitters; and	The assessing officer has considered all application material submitted by the applicant. The application has triggered public notification under section 230 of the EP Act and therefor submissions made against the amendment application can be considered during the decision stage.
(g) the best practice environmental management for activities under any relevant instrument, or proposed instrument, as follows— <ul style="list-style-type: none"> (i) an environmental authority; (ii) a transitional environmental program; (iii) an environmental protection order; (iv) a disposal permit; (v) a development approval; and 	The assessing officer has considered the best practice environmental management for the proposed activities. The appropriate regulatory instrument is the EA EPML00562013, and management plans required by the EA. There are no relevant transitional environmental programs, environmental protection order, disposal permit or development approval relevant to the EA or this application.
(h) the financial implications of the requirements under an instrument, or proposed instrument, mentioned in paragraph (g) as they would relate to the type of activity or industry carried out, or proposed to be carried out, under the instrument; and	The assessing officer has considered the financial implications. It can be reasonably expected that the applicant, who initiated the amendment application, has considered any additional financial costs resulting from the extension to the project, and any resulting cost of continuing compliance with changes to the EA conditions. Therefore, any financial implications are considered to be within the applicant's means to pay.
(i) the public interest ; and	The assessing officer has considered the public interest of the proposed amendment. As the project is located in close proximity to multiple sensitive receptors including the town of Moranbah and the Moranbah Airport, there is potential for public interest. The proposed amendment is subject to public notification in which time, the public will have the opportunity to make submissions.

	Additionally, with regards to all decisions, human rights have been considered at this stage of the assessment process. There are no reasonably foreseeable limitations for human rights under the <i>Human Rights Act 2019</i> for the assessment of the requirement for an EIS.
(j) any relevant site management plan ; and	There are no relevant site management plans for the land that is subject of this application.
(k) any relevant integrated environmental management system or proposed integrated environmental management system; and	There is no relevant integrated environment management system or proposed integrated environmental management system applicable to the EA or this application.
(l) any other matter prescribed under a regulation.	There are no further matters prescribed under regulation (i.e. the EP Reg.) for consideration.
General considerations	
<p><i>Where needed, make comments on the rating of the application against the standard criteria.</i></p> <p>With consideration of the above comments, the proposed amendment application is reasonably expected to be compliant with the standard criteria as defined by Schedule 4 of the EP Act.</p>	

Date : 5/04/2022 11:15:24 AM

From : "Pauline Gregory"

To : "Luisa Taufatofua" Luisa.Taufatofua@des.qld.gov.au

Cc : "EIS External Submissions" Eis@des.qld.gov.au

Subject : RE: For Decision, CAC Report for Caval Ridge Mine Horse Pit Extension (EPML00562013) - A-EA-AMD-100178679

Attachment : image001.png;image002.png;image003.png;image004.png;

Hi Luisa

Have set up a meeting with Chris L and Kate B to discuss on Thursday 7 April. I need to do up a draft CAC Decision before their meeting.

Cheers

Pauline



Pauline Gregory

Executive Assistant to **Christopher Loveday, Director**

Technical and Assessment Services | Operational Support

Environmental Services and Regulation

Department of Environment and Science

E: Pauline.Gregory@des.qld.gov.au

From: Luisa Taufatofua <Luisa.Taufatofua@des.qld.gov.au>

Sent: Tuesday, 5 April 2022 11:04 AM

To: EIS External Submissions

Cc: Kate Bennink; Pauline Gregory; Chris Loveday; Juliana Mccosker; Kathryn Eller

Subject: For Decision, CAC Report for Caval Ridge Mine Horse Pit Extension (EPML00562013) - A-EA-AMD-100178679

Importance: High

Good morning,

Please find attached for review and decision the CAC report for whether an EIS is required for the major EA (with public notification) amendment application for Caval Ridge Mine Horse Pit Extension, environmental authority EPML00562013.

It is recommended that an EIS is not required.

Please note the information request notice must be issued by 11 April 2022.

Please do not hesitate to contact me should you have any questions or concerns.

Kind regards,



Luisa Taufatofua

Senior Environmental Officer

Business Centre (Coal) | Coal and Central Qld Compliance

Department of Environment and Science

P 07 4987 9342

99 Hospital Road, Emerald QLD 4720

PO Box 3028, Emerald QLD 4720