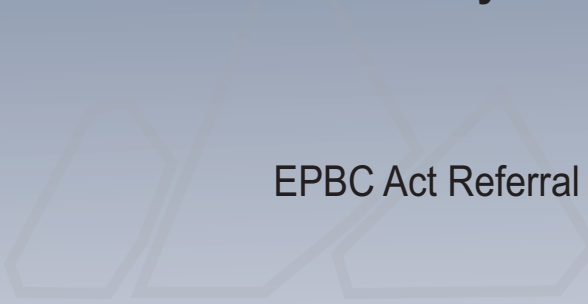




MIDDLEMOUNT COAL MINE

SOUTHERN EXTENSION PROJECT EPBC Act Preliminary Assessment Documentation (EPBC 2021/8920)

Attachment A EPBC Act Referral for the Middlemount Coal Mine Southern Extension Project



EPBC Act referral



Australian Government

Department of Agriculture, Water and the Environment

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Title of proposal	2021/8920 - Middlemount Coal Mine - Southern Open Cut Extension Project
Section 1	
Summary of your proposed action	
1.1 Project industry type	Mining
1.2 Provide a detailed description of the proposed action, including all proposed activities	
Background Middlemount Coal Pty Ltd (MCPL) owns and operates the Middlemount Coal Mine, an existing open cut coal mine located approximately 2.4 kilometres (km) to the south west of the Middlemount township within the Isaac Regional Local Government Area, Queensland (Figure 1). Full scale operations at the Middlemount Coal Mine commenced in July 2011, and will continue to operate until 2037. Components of the Middlemount Coal Mine have been previously referred under the Commonwealth Environment Protection and Biodiversity Conservation Act, 1999 (EPBC Act); two of those components were 'controlled actions' for impacts on listed threatened species and communities (Middlemount Coal Stage 2 Project [EPBC 2010/5394], North-eastern Extension [EPBC 2016/7717]) and a third component was a 'controlled action' for impacts on listed threatened species and communities and water resources (Western Extension [EPBC 2017/8130]). Referral This referral is for the Middlemount Coal Mine Southern Extension Project (the Action). The Action is separate from, but related to, the Middlemount Coal Stage 2 Project (2010/5394), North eastern Extension (2016/7717) and Western Extension (2017/8130). The Action, the subject of this Referral, does not include the components and operations of the approved Middlemount Coal Mine, whether or not those components or operations have been constructed or commenced, and whether or not the components of the Action are to be carried out or occur within the area of the approved Middlemount Coal Mine. The Action does not include ongoing exploration and geotechnical drilling activities. The general arrangement of the existing/approved Middlemount Coal Mine is shown on Figure 2. The approved disturbance footprint of the existing/approved Middlemount Coal Mine (grey shading), along with the approximate extent of additional disturbance associated with the Action (yellow shading), is shown on Figure 3. The general arrangement of the Middlemount Coal Mine incorporating the Action is shown on Figure 4. The Action would include (but not be limited to) the following key activities within the approximate extent of additional disturbance associated with the Action (Figures 3 and 4): • extension of the open cut pit to the south within Mining Leases (MLs) 70379 and 70417; • realignment and extension of the approved (but not yet constructed) eastern diversion of Roper Creek (Roper Creek Diversion 2) within ML 70379; • realignment of Roper Creek within ML 70417; • minor extensions to the eastern waste rock emplacement (East Dump) within MLs 70417, 700014 and 700027; • re-positioning of the approved southern flood levee and associated water management infrastructure within ML 70379; • extension of the southern flood levee and associated water management infrastructure within ML 70417; • continued development of sediment dams and other water management equipment and structures; • continued development of haul roads and internal roads; • continued development of soil stockpiles, laydown areas and borrow areas; and • continued extraction of run-of-mine coal up to approximately 5.7 Million tonnes per annum (Mtpa) using conventional open cut mining equipment; The Action would also include (but not be limited to) the following key activities within the approved disturbance footprint of the Middlemount Coal Mine: • placement of waste rock in existing waste rock emplacements and within the mined out void; and • use of existing and approved supporting mine infrastructure. Notwithstanding the above, the Action does not include any component or operation of the approved Middlemount Coal Mine (whether constructed or not or in operation or not) as it relates to the above described Action,	



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

In addition to the above, the Action includes an extension to the extraction of coal from 2037 to 2044.

Consistent with the approved operations at the Middlemount Coal Mine, open cut mining in the open cut pit extension to the south (within the Action area) would be by conventional open cut strip mining methods (with mining of the Middlemount Seam preceding mining of the underlying Pisces Seam). Vegetation would be progressively cleared ahead of the active open cut and waste rock emplacement areas. Topsoil would be stripped prior to excavation of underlying overburden or emplacement of waste rock. Where the topsoil cannot be directly used for progressive rehabilitation it would be stockpiled for use at a later date. Overburden and interburden would be removed and placed in both out-of-pit and in-pit waste rock emplacements (including in the minor extension areas of the East Dump proposed as part of the Action). Rehabilitation would be conducted progressively over the post mine landform.

The approved Middlemount Coal Project Stage 2 Project (2010/5394) included two diversions to Roper Creek (i.e. Roper Creek Diversions 1 and 2) (Figure 2). As part of the Action, MCPL proposes to realign and extend Roper Creek Diversion 2 to allow for access to the additional coal resources within the ML 70379 (Figure 3). Roper Creek Diversion 1 would not change as part of the Action.

The nature of open cut mining results in the formation of voids when the open cut resource is fully extracted. Two residual voids are approved to remain following completion of mining as part of the Middlemount Coal Mine Western Extension (2010/5394) (Figure 2). The Action would result in minor changes to the location and design of the approved residual voids, as well as a change to the final landform for the end of the mine life (Figure 4).

Run-of-mine coal would continue to be excavated then transported by truck for stockpiling or direct loading to the crusher before being conveyed to the existing coal handling and preparation plant for processing. Product coal (both coking and pulverised coal injection coal, and small amounts of thermal coal) would be stockpiled and reclaimed into a train loading bin for rail transport to the Dalrymple Bay Coal Terminal, Abbot Point Port or Wiggins Island Coal Export Terminal for export.

Overall, the Action would result in approximately 233 hectares (ha) of additional disturbance to facilitate the Action components (the "approximate extent of additional disturbance associated with the Action" shown on Figure 3), including the open cut pit extension, minor waste rock emplacement extensions, and the realignment and extension of Roper Creek Diversion 2. MCPL are proposing to offset impacts to matters of state environmental significance (MSES) as part of the State approval process for impacts associated with the Action (Section 4.1).

1.3 What is the extent and location of your proposed action?

See Appendix B

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland)

The Action area would be located within existing MLs 70379, 70417, 700014 and 700027.

The Middlemount township is located approximately 2.4 km to the north-east of the Action at its nearest point. Middlemount was established as a mining town in the 1980s and is primarily supported by the surrounding mining operations to this day. The Action area and the town are separated by Middle Mountain which rises approximately 100 metres (m) above the surrounding landscape (to a height of approximately 280 m Australian Height Datum [AHD]).

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

The extent of the proposed Action area development footprint (i.e. the disturbance footprint) is approximately 233 ha.

1.7 Proposed action location

Other - Middlemount-Dysart Road, Middlemount QLD 4746

1.8 Primary jurisdiction

Queensland

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

☐ Yes ☒ No

1.10 Is the proposed action subject to local government planning approval?

☐ Yes ☒ No

1.11 Provide an estimated start and estimated end date for the proposed action	Start Date	01/01/2022
	End Date	31/12/2044

1.12 Provide details of the context, planning framework and state and/or local Government requirements

Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The Action is being referred to the Commonwealth Minister for the Environment for consideration as to whether the Action is a 'controlled action' and requires approval under the EPBC Act (i.e. this EPBC Referral).

Qld Environmental Protection Act 1994 (EP Act)

Approval for the Action is proposed via the Environmental Authority (EA) amendment provisions under Chapter 5, Part 7 of the EP Act.

An EA amendment application was lodged with Qld Department of Environment and Science (DES) on 26 November 2020. On 18 December 2020, DES issued an assessment level decision indicating that the EA amendment application is a major amendment. On 4 February 2021, DES issued an Information Request to MCPL. On 16 February, MCPL provided a response to this Information Request.

Commonwealth Native Title Act 1993 (Native Title Act)

Native Title has been extinguished over the Action area and is therefore not relevant.

Notwithstanding, Indigenous Land Use Agreements or right to negotiate processes will be undertaken with relevant native title claimants where applicable.

Qld Mineral Resources Act 1989 (MR Act)

In November 2019, MCPL submitted an application to the Queensland Department of Natural Resources, Mines and Energy (DNRME) to vary the boundaries of ML 70379 (associated with the Middlemount Coal Mine) and ML 1998 (associated with the German Creek Coal Mine) under the MR Act.

In April 2020, the DNRME approved the variation application, which resulted in the extension of ML 70379 into an area previously associated with ML 1998.

Qld Aboriginal Cultural Heritage Act 2003

MCPL has approved Cultural Heritage Management Plans (CHMPs) in place with the Barada Barna Aboriginal Corporation (as the prescribed body corporate for the Barada Barna People) and Barada Barna, Kabalbara & Yetimarla People #4 (BBKY #4) native title claimants. Management of Aboriginal cultural heritage will continue to be conducted in accordance with the CHMPs.

Qld Water Act 2000 (Water Act)

MCPL has a water licence authorising the taking of, or interfering with, underground water for the Middlemount Coal Mine in accordance with section 1283 of the Water Act. As the Action would continue to be carried out within existing mining tenements, MCPL would not require any further approvals or permits under the Water Act.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

The realignment and extension of the approved (but not yet constructed) Roper Creek Diversion 2 is being assessed through the EA amendment process under the EP Act, and if approved, would be subject to conditions in EA EPML00716913.

Qld Nature Conservation Act 1992 (NC Act)

The Action area includes habitats containing species listed under the NC Act. MCPL would comply with the NC Act requirements by operating in accordance with the existing Species Management Program approved by the DES.

Qld Vegetation Management Act 1999 (VM Act)

No approvals under the VM Act are required for the Action as any vegetation cleared as part of the Action would be within a ML. The clearance of vegetation within the approximate extent of additional disturbance associated with the Action is being assessed through the EA amendment application process under the EP Act, and if approved, would be subject to conditions in EA EPML00716913.

Qld Environmental Offsets Regulation 2014 (Offsets Regulation)

The threatened species and vegetation communities listed in Section 2.4.1 are listed as MSES under the Offsets Regulation. The potential impacts of the Action on these MSES have been assessed in the Environmental Values Assessment (EVA) as part of the EA amendment application process under the EP Act.

Qld Planning Act 2016 (Planning Act)

No components of the Action are located outside of a ML, as such development approval under the Planning Act is not required for the Action.

Qld Biosecurity Act 2014 (Biosecurity Act)

The Action would result in approximately 233 ha of additional disturbance to facilitate the Action components. Surveys conducted by Biodiversity Australia identified some restricted matters under the Biosecurity Act within the approximate extent of additional disturbance associated with the Action (Figure 3). These are described further in Section 3.1.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders

Qld Department of Environment and Science

MCPL held preliminary meetings to discuss the Action with DES in October 2019, and in January, February and April 2020.

MCPL lodged a draft EVA to DES in September 2020. DES subsequently provided comments on the draft EVA in October 2020. MCPL updated the EVA to address DES's comments on the draft EVA, and lodged it to DES, along with an EA Amendment Application, in November 2020 (Section 1.12).

In January 2021, MCPL held a teleconference with DES to discuss the progress of the EA Amendment Application and DES's Information Request regarding the environmental assessment undertaken for the Action. On 4 February 2021, DES issued this Information Request to MCPL. On 16 February, MCPL provided a response to this Information Request.

Qld Department of Natural Resources, Mines and Energy

In November 2019, MCPL submitted an application to the DNRME to vary the boundaries of ML 70379 and ML 1998. This application included a brief description of the activities proposed to be undertaken as part of the Action within ML 70379.

In April 2020, the DNRME approved the variation application, which resulted in the extension of ML 70379 into an area previously associated with ML 1998.

Isaac Regional Council

MCPL held a meeting with the Isaac Regional Council to discuss the Action on 12 October 2020. Consultation with the Isaac Regional Council will continue to be undertaken during the assessment of the EA Amendment Application by the Qld Government.

Aboriginal Community

Consultation with the Aboriginal Community regarding the Action has been undertaken throughout preparation of the EVA by MCPL, and will continue to be undertaken by MCPL during the assessment of the EA Amendment Application by the Qld



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Government.

Surrounding Landholders and Local Community

MCPL distributed a newsletter to the surrounding landholders and local community in November 2020. The newsletter provided a brief update on the Middlemount Coal Mine operations, and an overview of the Action. Consultation with the surrounding landholders and local community will continue to be undertaken by MCPL during the assessment of the EA Amendment Application by the Qld Government.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project

As described in Section 1.12, an EA amendment application was lodged with the DES on 26 November 2020. The EA amendment application included a comprehensive EVA, which has been prepared in accordance with the requirements of the EP Act.

The EVA included a number of supporting technical studies prepared by various specialists, including:

- A Surface Water Assessment, prepared by WRM Water and Environment (2020).
- A Groundwater Assessment, prepared by Australasian Groundwater and Environmental Consultants Pty Ltd (AGE) (2020).
- A Terrestrial Ecology Assessment, prepared by Biodiversity Australia (2020).
- An Aquatic Ecology Assessment, prepared by DPM Envirosciences (2020).
- An Air Quality and Greenhouse Gas Assessment, prepared by Katestone Environmental (2020).
- A Noise Assessment, prepared by Renzo Tonin and Associates (2020).

These assessments were prepared in consideration of the relevant Commonwealth legislation and guidelines.

1.15 Is this action part of a staged development (or a component of a larger project)?

☐ Yes ☒ No

1.16 Is the proposed action related to other actions or proposals in the region?

☒ Yes ☐ No

1.16.1 Identify the nature/scope and location of the related action (Including under the relevant legislation)

Components of the Middlemount Coal Mine have been previously referred under the EPBC Act; two of those components were 'controlled actions' for impacts on listed threatened species and communities (Middlemount Coal Stage 2 Project [EPBC 2010/5394], North-eastern Extension [EPBC 2016/7717]) and a third component was a 'controlled action' for impacts on listed threatened species and communities and water resources (Western Extension [EPBC 2017/8130]).

This referral is for the Action (Figure 3), which is separate from, but related to, the Middlemount Coal Project Stage 2 Project (2010/5394), North-eastern Extension (2016/7717) and Western Extension (2017/8130). The Action does not include the components and operations of the approved Middlemount Coal Mine, whether or not those components or operations have been constructed or commenced, and whether or not the components of the Action are to be carried out or occur within the area of the approved Middlemount Coal Mine.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 2

Matters of national environmental significance

2.1 Is the proposed action likely to have any direct or indirect impact on the values of any World Heritage properties?

☐ Yes ☒ No

2.2 Is the proposed action likely to have any direct or indirect impact on the values of any National Heritage places?

☐ Yes ☒ No

2.3 Is the proposed action likely to have any direct or indirect impact on the ecological character of a Ramsar wetland?

☐ Yes ☒ No

2.4 Is the proposed action likely to have any direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

☒ Yes ☐ No

Species or threatened ecological community

Greater Glider (*Petauroides volans*)

Impact

The Action is not likely to have a significant impact on the Greater Glider. Refer to Attachment 'Koala_Greater_Glider_MNES_Assessment', Section 1.

Species or threatened ecological community

Koala (*Phascolarctos cinereus*)

Impact

The Action is not likely to have a significant impact on the Koala. See Attachment 'Koala_Greater_Glider_MNES_Assessment', Section 2.

Species or threatened ecological community

Ornamental Snake (*Denisonia maculata*)

Impact

The Action is not likely to have a significant impact on the Ornamental Snake.

The Ornamental Snake has not been recorded in the Action area during recent or previous surveys despite targeted searches. This species has only been recorded once in the Middlemount Coal Mine area and surrounds since the commencement of operations in 2011 (Figure 7).

Limited potential habitat for this species exists within the Action area, comprising approximately 2.2 ha of remnant vegetation and 10.6 ha of regrowth vegetation. Potential habitat in the Action area has been substantially modified as a result of clearing, weed invasion and cattle grazing. This has reduced the quality of habitat available for the Ornamental Snake in the Action area and has led to fragmentation and isolation of habitats (Biodiversity Australia, 2020).

Although some potential habitat for this species may be cleared by the Action (i.e. 12.8 ha), the area to be cleared is not considered material nor crucial to the viability of the local population of this species. Further:

- The Action would not fragment an existing important population into two or more populations.
- The Action would not modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

that this species is likely to decline.

- The Action would not interfere substantially with the recovery of this species.

MCPL's existing offset areas adjacent to the Middlemount Coal Mine include habitat for the Ornamental Snake in the order of approximately 1,750 ha, a much larger area than would be cleared by the Action (i.e. 12.5 ha). These offset areas are conserved and managed under the VM Act.

Species or threatened ecological community

Squatter Pigeon (southern) (*Geophaps scripta scripta*)

Impact

The Action is not likely to have a significant impact on the Squatter Pigeon (southern).

The Squatter Pigeon (southern) has not been recorded in the Action area during recent or previous surveys despite targeted searches. This species is however locally common and has been recorded on numerous occasions within the Middlemount Coal Mine area and surrounds (Biodiversity Australia, 2020) (Figure 7).

Although some potential habitat for this species may be cleared by the Action (i.e. approximately 233 ha) it is mostly (165 ha) regrowth vegetation. The Action is not likely to have a significant impact on the Squatter Pigeon (southern) because:

- Areas of remnant woodland on Land Zones 3, 4, 5, 7 and 10 are abundant in the landscape.
- There are numerous records of the Squatter Pigeon (southern) in the wider landscape (Figure 7), indicating that potential habitat for this species is relatively widespread outside the Action area.
- The Action would not fragment an existing important population into two or more populations.
- The Action would not modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that this species is likely to decline.
- The Action would not interfere substantially with the recovery of this species.

MCPL's existing offset areas adjacent to the Middlemount Coal Mine include habitat for the Squatter Pigeon (southern) in the order of approximately 5,005 ha, a much larger area than would be cleared by the Action (i.e. 233 ha). These offset areas are conserved and managed under the VM Act.

Species or threatened ecological community

Corben's Long-eared Bat, South-eastern Long-eared Bat (*Nyctophilus corbeni*)

Impact

The Action is not likely to have a significant impact on Corben's Long-eared Bat.

Corben's Long-eared Bat has not been recorded in Action area during recent or previous surveys. The nearest confirmed database record for this species is located greater than 250 km to the south of the Action area (Atlas of Living Australia [ALA], 2020).

Further, expert advice obtained by Biodiversity Australia (2020) indicates that the Middlemount Coal Mine area is beyond the known distribution of this species.

Notwithstanding, some generic foraging habitat (but no preferred foraging habitats) for this species is located in the additional disturbance area associated with the Action. Further:

- The available habitat within the Action area is relatively common in the immediate surrounds and across the wider locality, thereby providing alternate habitat resources for this species (if it was to occur).
- Corben's Long-eared Bat exhibits a wide-ranging feeding behaviour.
- The Action would not fragment an existing important population into two or more populations.
- The Action would not modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that this species is likely to decline.
- The Action would not interfere substantially with the recovery of this species.

Species or threatened ecological community

Brigalow (*Acacia harpophylla* dominant and co-dominant)

Impact

The Action is not likely to have a significant impact on the Brigalow (*Acacia harpophylla* dominant and codominant) Threatened Ecological Community (TEC) (Brigalow TEC).

The flora surveys undertaken by Biodiversity Australia (2020) have identified small patches of Brigalow TEC, totalling approximately 2.2 ha located within the Action area. The Brigalow TEC within the Action area is equivalent to regional ecosystem (RE) 11.3.1 (Figure 6).

The Action is not likely to significantly adversely impact on the Brigalow TEC given:

- the small size of the patches of Brigalow TEC in the Action area which are fragmented (totalling approximately 2.2



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

- ha);
- the Brigalow TEC in the Action area is not likely to be critical to the survival of the community; and
 - the Action would not increase fragmentation of the Brigalow TEC.

Species or threatened ecological community

Poplar Box Woodland

Impact

The Action is not likely to have a significant impact on Poplar Box Woodland TEC (Poplar Box TEC).

The flora surveys undertaken by Biodiversity Australia (2020) have identified small patches of Poplar Box TEC, totalling approximately 19.5 ha located within the Action area. The Poplar Box TEC within the Action area is equivalent to REs 11.3.2 and 11.3.2b (Figure 6).

The Action is not likely to significantly adversely impact on the Poplar TEC given:

- the small size of the patches of Poplar Box TEC in the Action area which are fragmented (totalling approximately 19.5 ha);
- the Poplar Box TEC in the Action area is not likely to be critical to the survival of the community; and
- the Action would not increase fragmentation of the Poplar Box TEC.

2.4.2 Do you consider this impact to be significant?

☐ Yes ☒ No

2.5 Is the proposed action likely to have any direct or indirect impact on the members of any listed migratory species or their habitat?

☐ Yes ☒ No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

☐ Yes ☒ No

2.7 Is the proposed action likely to be taken on or near Commonwealth land?

☐ Yes ☒ No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

☐ Yes ☒ No

2.9 Is the proposed action likely to have any direct or indirect impact on a water resource from coal seam gas or large coal mining development?

☒ Yes ☐ No

Water resource

Surface Water

Impact

The potential surface water impacts due to the Action are not considered to be significant (as defined in the Significant impact guidelines 1.3: Coal seam gas and large coal mining developments - impacts on water resources [DoE, 2013]), as:

- The realigned Roper creek Diversion 2 is expected to perform in a similar manner to the existing Roper Creek for in channel flows.

- The realigned Roper Creek Diversion 2 aims to achieve the following key objectives:
 - be self-sustaining and include geomorphic and vegetation features of regional watercourses and the surrounding landscape;
 - where possible, positively contribute to river health values for the system; and
 - not impose liability on the State, MCPL or the community to maintain the watercourse diversion and its associated components.

- The loss of catchment flows in Roper Creek due to the Action would be indiscernible, and as such the potential impact on water quantity in Roper Creek is considered negligible.

- The proposed realignment and extension of Roper Creek Diversion 2 is unlikely to impact on shallow groundwater or terrestrial vegetation as the alluvium is largely unsaturated, and Roper Creek is ephemeral with no existing baseflow in the vicinity of the Middlemount Coal Mine.

- Consistent with the Middlemount Coal Stage 2 Project (EPBC 2010/5394) and Western Extension (2017/8130), the water balance model shows that there are no modelled uncontrolled discharges from the mine affected water storages, so the Action would continue to achieve the assessment criteria objective under the Regulated Dams Operational Management Plan of a less than 10% chance of uncontrolled offsite discharges from the mine affected water dams.

- The Middlemount Coal Mine affected water releases are managed within an overarching strategic framework for



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

management of cumulative impacts of mining activities. The Action is expected to have negligible cumulative impact on surface water quality and associated environmental values when the proposed Action is compared with the carrying on of the Middlemount Coal Stage 2 Project (2010/5394), North eastern Extension (2016/7717) and Western Extension (2017/8130).

- Post-mining, the residual voids would, consistent with the existing/approved impacts of the Middlemount Coal Mine Western Extension (2017/8130), act as a groundwater sink. The minimised surface catchment reporting to the residual voids post-mining will be approximately 681 ha. This is approximately 1.7% of the total catchment area (~38,900 ha) of Roper Creek to the southern extent of the Middlemount Coal Mine MLs.

- The Action would excise an additional 110 ha during operations from the catchment area of the former Thirteen Mile Gully. This represents approximately 2% of the total catchment area of the former Thirteen Mile Gully (~5,600 ha), of which the majority has already been diverted to Roper Creek by the existing/approved Thirteen Mile Gully Diversion under the Middlemount Coal Stage 2 Project (2010/5394) and Western Extension (2017/8130).

Water resource

Groundwater—Aquifers

Impact

The potential groundwater impacts on aquifers due to the Action are not considered to be significant (as defined in the Significant impact guidelines 1.3: Coal seam gas and large coal mining developments - impacts on water resources [DoE, 2013]), as:

- Groundwater modelling for the Action indicates the predicted drawdown extents to the north, east and west due to the Middlemount Coal Mine (including the Action) are similar to those previously predicted and approved for the Western Extension (2017/81300), with the exception of an extension of the predicted drawdown in the Fort Cooper Coal Measures to the south.

- Groundwater modelling to assess the potential cumulative impacts between the Middlemount Coal Mine (including the Action) and surrounding mining operations (e.g. German Creek East, Foxleigh, Foxleigh Plains and Norwich Park) and the Arrow Bowen Gas Project (2012/63770) found no overlap between predicted drawdown extents of these operations in all model layers, with the exception of:

- intersection of the 1 m drawdown contours between the Middlemount Coal Mine (including the Action) and the German Creek East Mine final voids in the Middlemount Coal Seam and Fort Cooper Coal Measures; and

- intersection of the 2 m drawdown contours between the Middlemount Coal Mine (including the Action) and the German Creek East Mine final voids in the Pisces Coal Seam.

Importantly, there are no private groundwater bores located in these areas of overlapping depressurisation/ drawdown.

- Evaporation from the residual void lake surfaces would maintain a water level below the surrounding groundwater levels, forming a groundwater sink in the local environment. Evaporation from the lake surfaces would also slowly concentrate salts in the pit lake over time. The increasing salinity would not pose a risk to other aquifers and surface water features as the residual voids would remain a permanent sink (consistent with the Middlemount Coal Stage 2 Project [2010/5394], North-eastern Extension [2016/7717] and Western Extension [2017/8130]).

- No landholder water supply bores are located within the predicted drawdown/ depressurisation extents attributable to the proposed mine plan for the Action (consistent with the Middlemount Coal Stage 2 Project [2010/5394], North-eastern Extension [2016/7717] and Western Extension [2017/8130]).

Water resource

Groundwater – Groundwater Dependent Ecosystems

Impact

Groundwater – Groundwater Dependent Ecosystems The Action is not predicted to impact any aquatic or terrestrial groundwater dependent ecosystems (GDEs) since GDEs are assessed as being unlikely to occur within and surrounding the Action area on the basis that:

- the majority of the terrestrial vegetation associated with Roper Creek also occurs more widely across the landscape and is not restricted to areas where it could potentially access groundwater;

- Roper Creek is ephemeral and the depth to groundwater in the Middlemount Coal Mine area is typically around 20 metres below ground level (mbgl);

- the depth to groundwater within the palustrine wetlands north of ML 70417 and ML 70379 is in excess of 12 m depth; and

- there is no evidence of vegetation dieback resulting from existing/approved operations at the Middlemount Coal Mine.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Water resource

Groundwater - Stygofauna

Impact

The Action is not predicted to significantly impact stygofauna on the basis that:

- The potential for optimal stygofauna habitat at Middlemount Coal Mine is unlikely given the average salinity in both the Tertiary and Permian aquifers is in excess of 20,000 $\mu\text{S}/\text{cm}$, and the average depth to groundwater in the Permian aquifer is greater than 30 mbgl. This is in line with findings of similar studies undertaken at other neighbouring mines (e.g. Foxleigh Plains) and the Arrow Bowen Gas Project (EPBC 2012/6377).
- The Action is not predicted to significantly impact stygofauna considering the Action would only incrementally increase the groundwater drawdown from the approved Middlemount Coal Mine, the groundwater aquifer (similar stygofauna habitat) is extensive outside of the maximum zone of drawdown, and the sampling to date indicates there is either a low diversity of stygofauna or no stygofauna present in and outside the maximum zone of drawdown

2.9.2 Do you consider this impact to be significant?

☐ Yes ☒ No

2.10 Is the proposed action a nuclear action?

☐ Yes ☒ No

2.11 Is the proposed action to be taken by a Commonwealth agency?

☐ Yes ☒ No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage place overseas?

☐ Yes ☒ No

2.13 Is the proposed action likely to have any direct or indirect impact on any part of the environment in the Commonwealth marine area?

☐ Yes ☒ No



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 3

Description of the project area

3.1 Describe the flora and fauna relevant to the project area

A description of the flora and fauna relevant to the Action area is provided in 'EVA_4a_Terrestrial_Ecology_Assessment_Part_1', Sections 4.1, 4.2, 5.8 and 5.9, Pages 34 to 71 and 82-83. A summary is provided below.

The terrestrial flora and fauna in the Action area and surrounds has been subject to multiple studies since 2009. In 2020, Biodiversity Australia conducted additional flora and fauna surveys of the Action area and surrounds. Survey techniques included a combination of secondary and quaternary surveys, ground-truthing of regional ecosystems (RE's), identification of TECs under the NC Act and EPBC Act, and targeted searches for conservation significant species listed under the NC Act and EPBC Act.

Flora

Due to past and ongoing agricultural activities (e.g. clearing, grazing, logging, thinning), the Action area predominantly comprises non remnant vegetation and cleared land (approximately 165 ha) with patches of remnant vegetation (approximately 68 ha).

A total of eight individual RE's (as defined under the VM Act) were ground truthed within the Action area, represented by Eucalypt woodlands and small occurrences of Acacia dominated woodlands (Figure 6). These consist of:

- RE 11.3.1 – Acacia harpophylla and/or Casuarina cristata open forest on alluvial plains.
- RE 11.3.2 – Eucalyptus populnea woodland on alluvial plains.
- RE 11.3.2b - Eucalyptus camaldulensis (sometimes E. populnea and or E. tereticornis) woodland in drainage depressions.
- RE 11.3.25 - Eucalyptus tereticornis or E. camaldulensis woodland fringing drainage lines.
- RE 11.3.7 - Corymbia spp. woodland on alluvial plains.
- RE 11.5.3 - Eucalyptus populnea ± E. melanophloia ± Corymbia clarksoniana woodland on Cainozoic sand plains and/or remnant surfaces.
- RE 11.7.2 - Acacia spp. woodland on Cainozoic lateritic duricrust. Scarp retreat zone.
- RE 11.7.4 - Eucalyptus decorticans and/or Eucalyptus spp., Corymbia spp., Acacia spp., Lysicarpus angustifolius woodland on Cainozoic lateritic duricrust.

Surveys conducted by Biodiversity Australia found that weed invasion is common throughout the Action area, especially in disturbed areas. Prickly Pear (*Opuntia stricta*), Velvety Tree Pear (*Opuntia tomentosa*) and Harrisia Cactus (*Harrisia martinii*) which are identified as restricted matters under the Biosecurity Act were recorded in the Action area.

Fauna

A total of 79 fauna species were detected during the survey either opportunistically or during targeted surveys. Birds were the most common fauna group observed with a total of 51 species detected. 24 mammals, three amphibians and seven reptiles were also detected.

A number of animal pests have been recorded in the Action area, such as the Feral Cat (*Felis catus*), European Rabbit (*Oryctolagus cuniculus*), Cane Toad (*Rhinella marina*), Wild Dog (*Canis lupis*). Each of these are listed as restricted matters under the Biosecurity Act.

3.2 Describe the hydrology relevant to the project area (including water flows)

A detailed description of the hydrology relevant to the Action area is provided in 'EVA_2a_Surface_Water_Assessment_Part_1', Section 3, Pages 26 to 35, and 'EVA_3a_Groundwater_Assessment_Part_1', Section 5, pages 22 to 30. A summary is provided below.

Surface Water

The Action is located within the Roper Creek catchment, within the Mackenzie River sub basin of the greater Fitzroy Basin. The Action area lies within the plan area of the Water Plan (Fitzroy Basin) 2011 (within the Upper Mackenzie Sub-catchment).

There are two watercourses within the additional surface disturbance area associated with the Action, namely Roper



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Creek, and a small portion of Thirteen Mile Gully, the majority of which has already been diverted to Roper Creek by the existing/approved Thirteen Mile Gully Diversion under the Middlemount Coal Stage 2 Project (2010/5394) and Western Extension (2017/8130). An unnamed drainage line (referred to as Drainage Line 3) is located to the east of the Action area (Figure 6).

The approved Middlemount Coal Stage 2 Project (2010/5394) included two diversions to Roper Creek (i.e. Roper Creek Diversions 1 and 2) (Figure 2). As part of the Action, MCPL proposes to realign and extend Roper Creek Diversion 2 to allow for access to the additional coal resources within the ML 70379 (Figure 3). Roper Creek Diversion 1 would not change as part of the Action.

Groundwater

The geology in the vicinity of the Action comprises a Quaternary and Tertiary age sequence overlying older Permian age coal measures. These geological units can be separated into three key hydro stratigraphic units based on their hydraulic properties and lithology (AGE, 2020):

- Quaternary aged alluvial aquifer: consists of localised stream channel deposits and associated flood plain deposits. These units comprise a temporary (rainfall dependent) aquifer that is limited to the immediate vicinity of Roper Creek, Thirteen Mile Gully and drainages within the mining tenements. Neither Roper Creek nor Thirteen Mile Gully is targeted for water supply within the near vicinity of the Middlemount Coal Mine. When saturated, the groundwater flow in the Quaternary alluvium would be expected to be generally from north west to south east, following the regional topography and drainage network
- Tertiary aged Duaringa Formation: consists of thick clay-rich laterite which is sourced from highly weathered Permian sandstones and siltstones, and occasional basalt. The Duaringa Formation is not typically targeted for agricultural water supply and is (at best) a low yielding aquifer that would more commonly be regarded as an aquitard. Recharge to the Tertiary Formation occurs via direct infiltration from rainfall in areas where the unit crops out and via seepage from the overlying Quaternary where present and saturated.
 - Permian aged units:
 - Interburden/overburden: the bulk of the Permian coal measure strata is sandstone, siltstone, and mudstone that typically have low permeability and generally form aquitards.
 - Coal seams (principally the Middlemount and Pisces Seams): form low to moderate yielding aquifers confined by interburden / overburden units.
 - Recharge of the Permian coal measures occurs in areas where they sub-crop beneath the Tertiary cover.

3.3 Describe the soil and vegetation characteristics relevant to the project area

The land within the Action area is considered to be agricultural land “Class C”, which represents pasture land (i.e. land that is suitable only for improved or native pastures due to limitations which preclude continuous cultivation for crop production). No Strategic Cropping Land is mapped within, or in the vicinity of the Action.

Three soil units have been identified in the Action area:

- Yellow Duplex - sandy loam or sand soils on the flat plains away from drainage lines and on very gently inclined slopes with neutral to moderate acidity, very low salinity and very low organic carbon content.
- Grey-Brown Duplex – sandy to clay loam soils on the flat plains and on very gently inclined slopes with neutral to slight acidity, very low salinity and low organic carbon content. The subsoils of Grey Brown Duplex soils are saline.
- Alluvial Soils – clay loam soils along drainage features with very low salinity and medium organic carbon content.

The Yellow Duplex and Grey-Brown Duplex soils have moderate alkalinity and sodicity within the subsoils, and are moderately to highly dispersive. The Alluvial soils are neutral, have very low salinity and are considered to have a negligible potential for dispersion.

The vegetation characteristics of the Action area are described in Section 3.1.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area

There are no outstanding natural features or other unique values within the Action area.

3.5 Describe the status of native vegetation relevant to the project area

A detailed description of the vegetation condition in the Action area is provided in “EVA_4a_Terrestrial_Ecology_Assessment_Part_1”, Section 4.1, Pages 34 to 53. A summary is provided below.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

The Action area was found to have reasonable floristic diversity, however exotic grasses have outcompeted native species over large areas of the Action area, which has led to changes in forest structure and composition. Due to past and ongoing agricultural activities (e.g. clearing, grazing, logging, thinning), the Action area predominantly comprises non remnant vegetation and cleared land (approximately 165 ha) with patches of remnant vegetation (approximately 68 ha).

Surveys conducted by Biodiversity Australia (2020) found that weed invasion is common throughout the Action area, especially in disturbed areas. Prickly Pear (*Opuntia stricta*), Velvety Tree Pear (*Opuntia tomentosa*) and Harrisia Cactus (*Harrisia martini*) which are identified as restricted matters under the Biosecurity Act were recorded in the Action area.

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area

The natural topography is relatively flat, with an elevation ranging from approximately 160 to 170 metres Australian Height Datum (AHD). Approximately 1.5 km to the east of the Action, Middle Mountain rises to an elevation of approximately 280 m AHD.

3.7 Describe the current condition of the environment relevant to the project area

The majority of the Action area is located on freehold land owned by MCPL which is currently used for low intensity cattle grazing under an agistment agreement. A small portion of the additional disturbance area associated with the Action is located within Lot 11, TT443, which is owned by Anglo Coal (Figure 5).

Lot 11, TT 443 is listed on the DES Environmental Management Register (EMR) as having mine wastes related to:

- storing hazardous mine or exploration wastes, including, for example, tailings dams, overburden or waste rock dumps containing hazardous contaminants; or
- exploring for, or mining or processing, minerals in a way that exposes faces, or releases groundwater, containing hazardous contaminants.

During site inspections carried out by MCPL, no mine wastes were identified in the portion of Lot 11, TT 443 which overlaps the Action area.

Lot 3, SP282156 and Lot 2, SP248577, which partially overlap the Action area, are listed on EMR as having livestock dips or spray races. However, plans of these lots indicate that the Action is not likely to disturb areas where evidence of contamination or historical contaminating activities occur as the closest record (a dip site) is located approximately 2 km west of the Action area.

Lot 5, SP210524 which partially overlaps the Action area, is listed on the EMR as having a livestock dip or spray race. A review of aerial photography, historical registered plans and conversations with the land owner shows that the livestock dip or spray race associated with this lot is not located within the Action area.

Introduced fauna species and weed species are discussed in Section 3.1.

3.8 Describe any Commonwealth Heritage places or other places recognised as having heritage values relevant to the project

No National Heritage Places are situated in the Action area or surrounds.

3.9 Describe any Indigenous heritage values relevant to the project area

As described in Section 1.12, MCPL has approved CHMPs in place with the Barada Barna Aboriginal Corporation (as the prescribed body corporate for the Barada Barna People) and BBKY #4 native title claimants. Management of Aboriginal cultural heritage will continue to be conducted in accordance with the CHMPs.

As the Action will extend further south than the current extent of the CHMP's for the Middlemount Coal Mine, MCPL would seek to develop a CHMP with the Barada Kabalbara and Yetimarla People (the native title claimants over this area).

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area

The Action involves extension of operations within ML 70379 and ML 70417 to the south and extension of waste rock emplacement areas within ML 700014, ML 700027 and ML 70417 (Figure 3).

The area of additional surface disturbance associated with the Action is located on the following freehold lots and easements (Figure 5):

- Lot 11, TT 443 (owned by Anglo Coal).



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

- Lot 1, SP 282156 (owned by MCPL).
- Lot 2, SP248577 (owned by MCPL).
- Lot 5, SP210524 (owned by MCPL).
- Lot 3, SP282156 (owned by MCPL).

In addition to these lots above, the Barwon Park - Middlemount Road traverses a small portion of the additional surface disturbance associated with the Action. This is an unformed road that is mapped as a travelling stock reserve.

3.11 Describe any existing or any proposed uses relevant to the project area

The majority of the Action area is located on freehold land owned by MCPL which is currently used for low intensity cattle grazing under an agistment agreement. A small portion of the additional disturbance area associated with the Action is located within Lot 11, TT443, which is owned by Anglo Coal (Figure 5).

At the cessation of the Action, the post mining land use of all post-mine landforms, except the residual voids, would be low density beef cattle grazing, or native ecosystem as similar as possible to the pre Action vegetation communities. This is consistent with the post mining land use of the approved Middlemount Coal Stage 2 Project (2010/5394), North eastern Extension (2016/7717) and Western Extension (2017/8130).



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 4

Measures to avoid or reduce impacts

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action

Biodiversity

Potential impacts on biodiversity at the Middlemount Coal Mine are managed in accordance with the approved Environmental Management Plan and Species Management Program. The following measures would continue to be implemented to manage potential impacts on biodiversity associated with the Action:

- Vegetation clearing limits would be clearly marked (e.g. via surveying, pegging, temporary plastic mesh fencing or flagging tape) in order to prevent any inadvertent clearance beyond what is required and has been assessed.
- A licensed spotter-catcher and/or carer would inspect for fauna immediately prior to commencement of any vegetation removal and retrieve any fauna detected during works and undertake appropriate action. Pre-clearing checks would include searches of habitat and bird nests.
- Staff, including contractors, would be educated via inductions in relation to the risks of fauna injury and deaths and how to manage animals which are injured or displaced, including threatened species.
- Rehabilitation of disturbance areas would be undertaken progressively.

Further to the above, MCPL are proposing to offset impacts to MSES associated with the Action as part of the State approval process. The proposed offset area is located adjacent to the existing offset areas for the approved Middlemount Coal Stage 2 Project (2010/5394), North eastern Extension (2016/7717) and Western Extension (2017/8130), which are shown on Figure 7.

Consistent with Condition F30 of EA EPML00716913, MCPL would provide a Notice of Election for the identified Action offset area to the DES no less than three months before the commencement of the Action. MCPL would seek to secure the offset area through a Voluntary Declaration under the Qld VM Act.

Water

Potential impacts on water at the Middlemount Coal Mine are managed in accordance with the following approved management plans and protocols:

- Environmental Management Plan;
- Water Management Plan;
- Water Balance Modelling Report;
- Receiving Environment Monitoring Program;
- Erosion and Sediment Control Plan; and
- Mining Waste Management Plan.

Surface Water

The general principles to manage surface water at the Middlemount Coal Mine, which would continue to be implemented for the Action, include:

- The separation of clean, sediment laden, mine affected, tailings and contaminated water runoff.
- Minimise the area of surface disturbance, thus minimising the volume of sediment laden or contaminated runoff.
- Collect and contain on site all potential mine affected water pumped from the open cut pits in dedicated mine water storages.
- Retain and reuse on site any sediment laden water runoff that has high sediment concentrations whenever possible.
- Maximise the use of on-site water and thus minimise the need for importing external water.
- Prioritise the use of poorer quality water over better quality water.
- Release any sediment laden water runoff (not able to be retained and reused on site) in a controlled manner in accordance with EA EPML00716913.
- Flood mitigation works to provide a minimum of 1,000 year Average Recurrence Interval immunity from Thirteen Mile Gully and Roper Creek floods.

Groundwater

A groundwater monitoring network has been established at the Middlemount Coal Mine, which includes groundwater level and quality monitoring locations within and surrounding the mine site. Groundwater level and quality monitoring would continue to be undertaken for the Action in accordance with the approved management plans and protocols listed above.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Groundwater monitoring includes use of water level loggers in select existing monitoring bores. These enable continuous measurement of groundwater level fluctuations for determining to what extent groundwater level changes are attributable to rainfall recharge or from potential water level declines from depressurisation resulting from open cut mining at the Middlemount Coal Mine.

Given the predicted drawdown extents due to the Middlemount Coal Mine including the Action are similar to those previously predicted and approved for the Western Extension (2017/81300), no additional groundwater monitoring bores are proposed for the Action.

MCPL has a water licence authorising the taking of, or interfering with, underground water for the Middlemount Coal Mine in accordance with section 1283 of the Water Act. As the Action would continue to be carried out within existing mining tenements, no further approvals under the Qld Water Act are required.

The realignment and extension of the approved (but not yet constructed) Roper Creek Diversion 2 is being assessed through the EA amendment process under the EP Act, and if approved, would be subject to conditions in EA EPML00716913.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved

An assessment of potential impacts associated with the Action (outlined in Section 2) indicates that it is unlikely to significantly impact any MNES. Any residual impacts on MNES would be appropriately managed and/or mitigated through the implementation of relevant environmental plans or strategies described in Section 4.1 to further minimise the impacts of the proposed Action. A summary of the management, monitoring and reporting commitments that would be implemented by MCPL throughout the life of the Action is provided below.

Biodiversity

- Continued implementation of land clearance measures to minimise impacts on fauna.
- Continued implementation of the Species Management Program under section 332 of the Qld Nature Conservation [Wildlife Management] Regulation 2006 as required.
- Continued implementation of weed and feral animal control measures and vegetation management measures in accordance with the Environmental Management Plan.
- Offset impacts to MSES associated with the Action as part of the State approval process (in addition to the existing offsets for the existing/approved Middlemount Coal Mine) for the additional surface disturbance area associated with the Action.

Surface Water

- Site water management and monitoring would continue to be conducted in accordance with the Water Management Plan, and would be updated to incorporate the Action.
- If required, controlled releases would continue to be undertaken for the Action in accordance with the criteria in EA EPML00716913.
- Routine surface water quality monitoring would continue to be undertaken for receiving waters and additional locations monitored.
- Incorporation of the flood protection levee that would exist during mining operations into the waste rock emplacement to form a stable and self sustaining final landform that does not require long term maintenance.
- Development of an operation and monitoring plan for Roper Creek Diversion 2 as part of detailed design.

Groundwater

- Ongoing groundwater level and quality monitoring within and surrounding the mine site.
- Continued installation of water level loggers in select monitoring bores to record groundwater level measurements at regular intervals.
- Review of the groundwater monitoring program throughout the life of the Action to determine any updates required to the monitoring network.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 5

Conclusion on the likelihood of significant impacts

5.1 You indicated the below ticked items to be of significant impact and therefore you consider the action to be a controlled action

- ☐ World Heritage properties
- ☐ National Heritage places
- ☐ Wetlands of international importance (declared Ramsar wetlands)
- ☐ Listed threatened species or any threatened ecological community
- ☐ Listed migratory species
- ☐ Marine environment outside Commonwealth marine areas
- ☐ Protection of the environment from actions involving Commonwealth land
- ☐ Great Barrier Reef Marine Park
- ☐ A water resource, in relation to coal seam gas development and large coal mining development
- ☐ Protection of the environment from nuclear actions
- ☐ Protection of the environment from Commonwealth actions
- ☐ Commonwealth Heritage places overseas
- ☐ Commonwealth marine areas

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action

On the basis of the reasons provided in Section 2, the Action:

Will NOT have a significant impact on:

- (a) the World Heritage values of a declared World Heritage property;
- (b) the National Heritage values of a National Heritage place;
- (c) the ecological character of wetlands of international importance;
- (d) the marine environment outside a Commonwealth marine area;
- (e) the environment on Commonwealth land;
- (f) the Great Barrier Reef Marine Park;
- (g) the environment from nuclear action;
- (h) the Commonwealth Heritage values of a Commonwealth Heritage place overseas; or
- (i) the environment inside a Commonwealth marine area; and

is NOT LIKELY to have a significant impact on:

- (a) a listed threatened species, community, or their habitat;
- (b) a listed migratory species; or
- (c) a water resource, in relation to coal seam gas development and large coal mining development.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 6

Environmental record of the person proposing to take the action

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Explain in further detail

MCPL has a strong record in environmental management and business operation. MCPL conducts its mining operations in accordance with a range of regulatory consents, leases and licenses. MCPL has established and is committed to continue open and constructive dialogue with the local community and stakeholders.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application

MCPL was issued with four Penalty Infringement Notices in March 2013 by the Queensland Department of Environment and Heritage Protection due to a breach of four conditions of EA EPML00716913, associated with the release of mine affected water from Sediment Dam 1 during a heavy rainfall event.

No other Penalty Infringement Notices have been issued to MCPL, and no proceedings under a Commonwealth or State law have been made against MCPL to date.

MCPL have various management plans and procedures in place, including a water management plan, in order to minimise the potential for releases of mine affected water.

As a result, this matter should not prevent the Minister from granting its consent to the activities described in the EPBC Referral.

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

☒ Yes ☐ No

6.3.1 If the person taking the action is a corporation, provide details of the corporation's environmental policy and planning framework

MCPL has a documented Environment and Cultural Heritage Policy that applies to the Middlemount Coal Mine, which states:

We strive to produce coal profitably without harming our people or damaging our equipment, while caring for the environment and preserving Cultural Heritage and providing a positive contribution to our communities within which we live and work. To achieve our goal MCPL will:

- Comply with all applicable Environmental and Cultural Heritage Legislation, Regulations and other statutory obligations to control, reduce and mitigate any environmental or CH impacts generated by the Project;
- Communicate the MCPL Environment and Cultural Heritage Policy and requirements of the site Environmental Management System to all employees and other stakeholders as appropriate to ensure they are aware of their obligations;
- Seek to achieve personal commitment of all employees, consultants, contractors and service providers to the sites environmental obligations and compliance with the requirements of our Environmental Management System (EMS); and
- Systematically manage activities to minimise impacts and the generation of pollution from our operations and achieve continual improvement in environmental performance.

MCPL will implement this policy by:

- Maintaining and continually improving our EMS through a framework of environmental objectives and environmental targets;
- Identifying our compliance obligations and significant Environmental Aspects and Impacts and suitable controls;
- Assigning responsibility for preventing and managing environmental impacts clearly to individuals who have the authority, responsibility and control over the activities and infrastructure that may interact with the environment;
- Providing environmental education and training for all employees and visitors;
- Promoting an environmentally responsible culture within our organisation; and
- Regularly monitoring our environmental performance and taking appropriate actions to ensure that we continue to achieve our goals.

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

☒ Yes ☐ No



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

6.4.1 EPBC Act No and/or Name of Proposal

Components of the Middlemount Coal Mine have been previously referred under the EPBC Act, namely the Middlemount Coal Stage 2 Project (EPBC 2010/5394), North-eastern Extension (EPBC 2016/7717) and Western Extension (EPBC 2017/8130).



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 7

Information sources

Reference source

Atlas of Living Australia (2020) Corben's Long-Eared Bat. Webpage. Accessed 10 December 2020.

Reliability

Well known dataset of species records across Australia.

Uncertainties

N/A

Reference source

Australasian Groundwater and Environmental Consultants Pty Ltd (2020) Middlemount Coal Mine Southern Extension Project Groundwater Impact Assessment.

Reliability

Assessment report (uploaded and attached)

Uncertainties

N/A

Reference source

Biodiversity Australia (2020) Middlemount Coal Mine Southern Extension Project Terrestrial Ecology.

Reliability

Assessment report (uploaded and attached)

Uncertainties

N/A

Reference source

Department of the Environment (2013) Significant impact guidelines 1.3: Coal seam gas and large coal mining developments - impacts on water resources.

Reliability

Published guideline prepared as part of the Commonwealth EPBC Act.

Uncertainties

N/A

Reference source

Department of the Environment (2014) EPBC Act Referral Guidelines for the Vulnerable Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory). Prepared by the Commonwealth Department of the Environment.

Reliability

Published guideline prepared as part of the Commonwealth EPBC Act.

Uncertainties

N/A



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Reference source
DPM Envirosiences (2020) Middlemount Coal Mine Southern Extension Project – Aquatic Ecology Assessment.
Reliability
Assessment report (uploaded and attached)
Uncertainties
N/A

Reference source
Katestone Environmental (2020) Air Quality and Greenhouse Gas Report for the Middlemount Coal Mine Southern Extension Project.
Reliability
Assessment report (uploaded and attached)
Uncertainties
N/A

Reference source
Renzo Tonin & Associates (2020) Middlemount Southern Extension Project Noise Impact Assessment.
Reliability
Assessment report (uploaded and attached)
Uncertainties
N/A

Reference source
WRM Water and Environment (2020) Middlemount Southern Extension Project Surface Water Impact Assessment.
Reliability
Assessment report (uploaded and attached)
Uncertainties
N/A



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 8
Proposed alternatives
Do you have any feasible alternatives to taking the proposed action? Yes ☒ No



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 9

Person proposing the action

9.1.1 Is the person proposing the action an organisation or business?

☒ Yes ☐ No

Organisation

Organisation name (as registered for ABN/ACN)	YANCOAL AUSTRALIA LTD
Business name	
ABN	82111859119
ACN	
Business address	Darling Park - Tower 2, Level 18, 201 Sussex Street, SYDNEY, 2000, NSW, AUSTRALIA
Postal address	
Main Phone number	(02) 8583 5910
Fax	
Primary email address	Mark.Jacobs@yancoal.com.au
Secondary email address	

9.1.2 I qualify for exemption from fees under Regulation 5.23(1)(ii) of the EPBC Regulations because I am:

☐ Small business
☒ Not applicable

9.1.2.2 I would like to apply for a waiver of full or partial fees under Regulation 5.21A of the EPBC Regulations

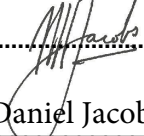
☐ Yes ☒ No

9.1.3 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name	Mark
Last name	Jacobs
Job title	Executive General Manager - Environment & Community
Phone	
Mobile	
Fax	
Email	Mark.Jacobs@yancoal.com.au
Primary address	Darling Park - Tower 2, Level 18, 201 Sussex Street, SYDNEY, 2000, NSW, AUSTRALIA
Address	

Declaration: Person proposing the action (To be signed by the person at 9.1.3)

I, Mark Daniel Jacobs, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity.

Signature:  Date: 19 April 2021

I, Mark Daniel Jacobs, the person proposing the action, consent to the designation of Adam Heap as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature:  Date: 19 April 2021



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Proposed designated proponent**9.2.1 Is the proposed designated proponent an organisation or business?**

☒ Yes ☐ No

Organisation**Organisation name (as registered for ABN/ACN)**

MIDDLEMOUNT COAL PTY LTD

Business name**ABN**

49122348412

ACN**Business address**Level 4, 100 Melbourne Street, South Brisbane, 4101,
Queensland, AUSTRALIA**Postal address****Main Phone number**

07 3225 5500

Fax**Primary email address**

aheap@middlemountcoal.com.au

Secondary email address**9.2.2 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)****First name**

Adam

Last name

Heap

Job title

Environment & Community Manager

Phone

07 4985 0059

Mobile**Fax****Email**

aheap@middlemountcoal.com.au

Primary addressLevel 4, 100 Melbourne Street, Brisbane, 4101, QLD,
Australia**Address****Declaration: Proposed Designated Proponent**

I, Adam Heap, the
proposed designated proponent, consent to the designation of
myself as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature: Date: 19-04-21



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Referring party (person preparing the information)**9.3.1 Is the referring party an organisation or a business?**

☒ Yes ☐ No

Organisation**Organisation name (as registered for ABN/ACN)**

YANCOAL AUSTRALIA LTD

Business name**ABN**

82111859119

ACN**Business address**Darling Park – Tower 2, Level 18, 201 Sussex Street,
SYDNEY, 2000, NSW, Australia**Postal address****Main Phone number**

02 8583 5300

Fax**Primary email address**

Mark.Jacobs@yancoal.com.au

Secondary email address

michael.moore@yancoal.coam.au

9.3.2 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)**First name**

Mark

Last name

Jacobs

Job title

Executive General Manager - Environment & Community

Phone

02 8583 5910

Mobile**Fax****Email**

Mark.Jacobs@yancoal.com.au

Primary addressDarling Park - Tower 2, Level 18, 201 Sussex Street,
Sydney, 2000, NSW, Australia**Address****Declaration: Referring party (person preparing the information)**

I, Mark Daniel Jacobs, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.

Signature:  Date: 19 April 2021



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Appendix A	
Attachment	
Document Type	File Name
action_area_images	MSES_ProtectedWildlifeHabitatAreas.shp
action_area_images	Att-1_Figures_1-8_Combined.pdf
action_area_images	SE_ActionArea.shp
govt_approval_conditions	Att_EA_EPML00716913.pdf
dbf	SE_AdditionalDisturbance.dbf
prj	SE_AdditionalDisturbance.prj
shp	SE_AdditionalDisturbance.shp
shx	SE_AdditionalDisturbance.shx
supporting_tech_reports	EVA_1a_EVA_Main Text_Part_1.pdf
supporting_tech_reports	EVA_1b_EVA_Main Text_Part_2.pdf
supporting_tech_reports	EVA_6_Air_Quality_and_Greenhouse_Gas_Assessment.pdf
supporting_tech_reports	EVA_7_Noise_Assessment.pdf
supporting_tech_reports	Koala_Greater_Glider_MNES_Assessment.pdf
flora_fauna_investigation	EVA_4a_Terrestrial_Ecology_Assessment_Part_1.pdf
flora_fauna_investigation	EVA_4b_Terrestrial_Ecology_Assessment_Part_2.pdf
flora_fauna_investigation	EVA_5a_Aquatic_Ecology_Assessment_Part_1.pdf
flora_fauna_investigation	EVA_5b_Aquatic_Ecology_Assessment_Part_2.pdf
hydro_investigation_files	EVA_2a_Surface_Water_Assessment_Part_1.pdf
hydro_investigation_files	EVA_2b_Surface_Water_Assessment_Part_2.pdf
hydro_investigation_files	EVA_2c_Surface_Water_Assessment_Part_3.pdf
hydro_investigation_files	EVA_3a_Groundwater_Assessment_Part_1.pdf
hydro_investigation_files	EVA_3b_Groundwater_Assessment_Part_2.pdf
hydro_investigation_files	EVA_3c_Groundwater_Assessment_Part_3.pdf
hydro_investigation_files	EVA_3d_Groundwater_Assessment_Part_4.pdf
hydro_investigation_files	EVA_3e_Groundwater_Assessment_Part_5.pdf
hydro_investigation_files	EVA_9.Att2_Groundwater_Model_Peer_Review_Ltrr.pdf
corp_env_policy_docs	6_MCPL_Environment_and_Cultural_Heritage_Policy.pdf

Appendix B
Coordinates