Title of Proposal - Middlemount Coal Mine - Western Extension Project

Section 1 - Summary of your proposed action

Provide a summary of your proposed action, including any consultations undertaken.

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 7 kilometres (km) to the south west of the Middlemount township within the Isaac Regional Local Government Area (Figures 1 and 2). Stage 2 mining operations at the Middlemount Coal Mine commenced in 2012, and will continue until 2031.

Components of the Middlemount Coal Mine have been previously referred under the Commonwealth Environment Protection and Biodiversity Conservation Act, 1999 (EPBC Act) and those components were ‘controlled actions’ for impacts on listed threatened species and communities (Middlemount Coal Project Stage 2 [EPBC 2010/5394] and North-eastern Extension [EPBC 2016/7717]).

Referral

This referral is for the Middlemount Coal Mine Western Extension Project (the Action) (Figure 3). The Action is separate from, but related to, the Middlemount Coal Project Stage 2 Project (2010/5394) and North-eastern Extension (2016/7717). 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 would include:

• extension of the open cut pit within Mining Lease (ML) 70379 to the north-west (Figure 3);
• placement of waste rock in existing emplacements, expanded emplacements (including an extension of the Eastern Dump to the east - Figure 3) and within the mined out void;
• progressive development of sediment dams, pipelines and other water management equipment and structures (including levees and realignment of existing diversion structures);
• progressive development of new haul roads and internal roads;
• continued development of soil stockpiles, laydown areas and borrow areas;

• continued use of existing and approved supporting mine infrastructure;
• extension of the approved mine life by approximately six years (to 2037); and
• a change to the final landform for the end of the mine life.

Consistent with the approved operations at the Middlemount Coal Mine, open cut mining to the north-west 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 emplacement in new areas proposed as part of the Action).

The Middlemount Coal Project Stage 2 Project (2010/5394) included a diversion to divert runoff following rainfall events from Thirteen Mile Gully to Roper Creek (Figure 2). As part of the Action, MCPL proposes to realign the diversion to allow for access to the additional coal resources within the ML 70379 (Figure 3).

Rehabilitation would be conducted progressively over the post mine landform. The Action would include an extension of the Eastern Dump to the east to improve mining efficiency and rehabilitation outcomes by alleviating the partial “saw tooth” layout of the currently approved dump design (Figure 3).

The nature of open cut mining results in the formation of voids when the open cut resource is fully extracted. One final void was anticipated to remain following completion of mining as part of the Middlemount Coal Project Stage 2 Project (2010/5394) (Figure 2). The Action would result in changes to the existing final void in the northern area of the open cut extent, and creation of an additional final void in the southern area of the open cut extent, upon completion of mining operations (Figure 3).

As is currently approved, run-of-mine coal would 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) would be stockpiled and reclaimed into a train loading bin for rail transport to the Dalrymple Bay Coal Terminal or Abbot Point Port for export.

MCPL manage a total of approximately 3,944 hectares (ha) of land dedicated to conservation. The Action would require a very small portion (approximately 1.1%, 43 ha) of the Middlemount Coal (Stage 2) Project Offset Area (EPBC 2010/5394) to be relocated (Figure 6). The offset area has a total area of 3,280 ha on Declared Area Map 2013/003919 (Figure 6). The vegetation in the portion of the Middlemount Coal (Stage 2) Project Offset Area to be cleared comprises non-remnant (regrowth) vegetation, Regional Ecosystem (RE) 11.3.2 and RE 11.3.1 (Figure 5).

1.3 What is the extent and location of your proposed action? Use the polygon tool on the

map below to mark the location of your proposed action.

Area	Point	Latitude	Longitude
Approximate Area of the Action	1	-22.885899557403	148.63747436943
Approximate Area of the Action	2	-22.876568481757	148.61979324761
Approximate Area of the Action	3	-22.824365901935	148.61069519463
Approximate Area of the Action	4	-22.809967121205	148.61378509941
Approximate Area of the Action	5	-22.816612901478	148.66871674004
Approximate Area of the Action	6	-22.841610788757	148.67729980889
Approximate Area of the Action	7	-22.853000707857	148.69515259209
Approximate Area of the Action	8	-22.886374001742	148.66940338555
Approximate Area of the Action	9	-22.886374001742	148.66923172417
Approximate Area of the Action	10	-22.885899557403	148.63747436943

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 in ML 70379, ML 70417 and in a new Mining Lease Application (MLA) Area for the East Dump.

The Middlemount township is located approximately 2.4 km to the 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 260 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 additional surface disturbance associated with the Action is approximately 575 ha.

1.7 Is the proposed action a street address or lot?

Street Address

Middlemount Coal Mine

Dysart Middlemount Road
Middlemount QLD 4746
Australia

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?

No

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

No

1.11 Provide an estimated start and estimated end date for the proposed action.

Start date 12/2018

End date 12/2038

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.

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 Heritage Protection (EHP) on 25 July 2017.

Qld Mineral Resources Act, 1989

Concurrent to the EA amendment application, MCPL is in the process of applying for surface rights across the recently acquired portion of ML 70379 and a MLA for infrastructure to facilitate the extension of the East Dump.

Qld Aboriginal Cultural Heritage Act, 2003

MCPL has approved Cultural Heritage Management Plans (CHMPs) in place with 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)

The Action may require permits under the *Water Act, 2000*.

Nature Conservation Act, 1992 (NC Act)

There is the potential for the Action area to include habitat and species specified under the NC Act. MCPL would apply for relevant licences and permits under the NC Act.

Vegetation Management Act, 1999 (VM Act)

MCPL propose to request the Chief Executive of the Department of Natural Resources and Mines (DNRM) to end the existing Voluntary Declaration (VDec) under the VM Act (Declared Area Map 2013/003919) and create a new VDec over a modified offset area.

Sustainable Planning Act, 2009 (SPA Act)

The Middlemount Coal Project Stage 2 Project (2010/5394) included a diversion to divert runoff following rainfall events from Thirteen Mile Gully to Roper Creek (Figure 2). The Thirteen Mile Gully Diversion is approved under the SPA Act which may require variation to reduce the extent of the diversion approved under the SPA Act.

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

MCPL held a pre-lodgement meeting with EHP regarding the Action (and the amendment application to EA EPML00716913) on 20 July 2017.

Consultation with the Barada Barna People and BBKY #4 native title claimants will be conducted in accordance with the requirements of the Qld *Native Title Act, 1993* in relation to Native Title issues. Consultation in relation to Indigenous cultural heritage will be conducted in accordance with the requirements of the Qld *Aboriginal Cultural Heritage Act, 2003*.

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.

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

Concurrent to the EA amendment application process, MCPL is in the process of applying for surface rights across the recently acquired portion of the ML 70379 and MLA for infrastructure to facilitate the extension of the East Dump.

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

No

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

Yes

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 and those components were ‘controlled actions’ for impacts on listed threatened species and communities (Middlemount Coal Project Stage 2 [EPBC 2010/5394] and North-eastern Extension [EPBC 2016/7717]).

This referral is for the Action (Figure 3). The Action is separate from, but related to, the Middlemount Coal Project Stage 2 Project (2010/5394) and North-eastern Extension (2016/7717). 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.

Section 2 - Matters of National Environmental Significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The interactive map tool can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest. Consideration of likely impacts should include both direct and indirect impacts.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The following resources can assist you in your assessment of likely impacts:

• Profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;

• Significant Impact Guidelines 1.1 – Matters of National Environmental Significance;

• Significant Impact Guideline 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies.

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

No

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

No

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

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

2.4.1 Impact table

Species	Impact
Ornamental Snake (Denisonia maculata)	This species has been previously recorded with

Species	Impact
	regrowth RE 11.3.1 that is approved to be cleared, however it was not found in the additional disturbance footprint associated with the Action during the recent or previous surveys despite targeted searches. Limited potential habitat for this species exists within the Action area, comprising a 0.5 ha patch of RE 11.4.9 (Brigalow) on the edge of the approved mine footprint and approximately 14.5 ha of RE 11.3.1 (Brigalow). The regrowth Brigalow is unlikely to provide habitat for the Ornamental Snake as it has been previously cleared and does not have sufficient microhabitat requirements (e.g. fallen timber) for shelter and prey species (Naturecall, pers. comm.). Although some potential habitat for this species may be cleared by the Action (i.e. 15 ha), the area to be cleared is not considered material nor crucial to the viability of the local population of this species. The Action is unlikely to significantly adversely impact this species given: • This species has not been recorded within the Action area. • There is limited habitat for this species within the Action area (i.e. approximately 14.5 ha), and potential habitat is more abundant 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.
Squatter Pigeon (southern) (Geophaps scripta scripta)	This species was recorded by Naturecall (pers comm) during the recent fauna surveys over the Action area and surrounds. This species is locally common and has also been recorded on numerous occasions within the wider locality (Naturecall, 2014; Parsons Brinkerhoff, 2010) (Figure 5). Although some potential habitat for this species may be cleared by the Action (i.e. approximately 375 ha, including approximately 190 ha of regrowth vegetation), the area to be cleared is not considered material nor crucial to the viability of the local population of this species. The Action is unlikely to significantly

Species	Impact
	adversely impact this species given: • 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 in the wider landscape (Figure 5), 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.
Greater Glider (Petauroides volans)	This species was recorded on numerous occasions by Naturecall (pers comm) during the recent fauna surveys. In addition the Greater Glider has been recorded on ten occasions during pre-clearing activities over the Action area and surrounds in the past two years (Figure 5). Although some potential habitat for this species may be cleared by the Action (i.e. approximately 171 ha), the area to be cleared is not considered material nor crucial to the viability of the local population of this species. The Action is unlikely to significantly adversely impact this species given: • Areas of remnant woodland are abundant in the wider locality. • There are numerous records of the Greater Glider in the wider landscape (Figure 5), 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.
Koala (Phascolarctos cinereus)	Naturecall (pers. comm.) identified a Koala scat just on the boundary of the Action area in habitat (RE 11.5.3) which continues into the Action area (Figure 5). In addition, the Koala has been recorded within approximately 5 km of the Action area by previous surveys (Naturecall,

Species	Impact
	2014) (Figure 5). Given the limited number of survey records in the wider locality, it appears that a very low density Koala population may be present in the habitat surrounding the Action area. Given the low nutrient soils and scarcity of preferred foraging trees, Koala home ranges would be very large (Naturecall, pers. comm.). Given there is evidence that the Koala may utilise the habitat within the Action area from time to time and the area contains known feed tree species for the Koala, it is concluded that the Action area contains habitat critical to the survival of the Koala, in accordance with the EPBC Act Referral Guideline for the Vulnerable Koala (Department of the Environment and Energy [DEE], 2014). Despite this, the area of potential habitat to be cleared (i.e. approximately 171 ha) is not considered material nor crucial to the viability of the local population of this species. The Action is unlikely to significantly adversely impact this species given: • The limited number of survey records in the wider locality. • 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. • 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.
Corben's Long-eared Bat, South-eastern Long-eared Bat (Nyctophilus corbeni)	This species has not been recorded within the Action area or surrounds during any previous survey work. The nearest confirmed database record for this species is located greater than 250 km to the south-west of the Action area (Atlas of Living Australia [ALA], 2017). Although some potential habitat for this species may be cleared by the Action (i.e. approximately 186 ha), the area to be cleared is not considered material nor crucial to the viability of the local population of this species. The Action is unlikely to significantly adversely impact this species

Species	Impact
	given: • This species has not been recorded within the Action area or surrounds. • 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. • The wide-ranging feeding behaviour of the species. • 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.
Brigalow (Acacia harpophylla dominant and co-dominant)	The flora surveys undertaken by Naturecall (pers. comm.) have identified small patches of the Brigalow (Acacia harpophylla dominant and codominant) Endangered Ecological Community (Brigalow EEC), totalling approximately 20 ha located within the Action area (including approximately 5 ha of regrowth vegetation) (Naturecall, pers. comm.). The Brigalow communities within the Action area are equivalent to RE 11.3.1 and RE 11.4.9 (Figure 5). The Action is not likely to significantly adversely impact on the Brigalow EEC given: • the small size of the patches of Brigalow EEC in the Action area which are fragmented; • the Brigalow EEC 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 EEC.

2.4.2 Do you consider this impact to be significant?

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

2.5.1 Impact table

Species	Impact
Fork-tailed Swift (Apus pacificus)	This species was not recorded during recent surveys undertaken by Naturecall (pers. comm.) within the Action area or surrounds. ALA (2017) shows that records of this species are widespread throughout the remainder of Eastern Australia. The works to be undertaken within the Action area are not likely to have a significant impact on the Fork-tailed Swift, given they would not: • substantially modify, destroy or isolate an area of important habitat for the Fork-tailed Swift; • result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the Fork-tailed Swift; or • seriously disrupt the lifecycle of an ecologically significant proportion of the population of the Fork-tailed Swift.
Oriental Cuckoo, Horsfield's Cuckoo (Cuculus optatus)	This species was not recorded during recent surveys undertaken by Naturecall (pers. comm.) within the Action area or surrounds. ALA (2017) shows that records of the Oriental Cuckoo are widespread throughout coastal Qld and northern Australia (ALA, 2017). The works to be undertaken within the Action area are not likely to have a significant impact on Oriental Cuckoo, given they would not: • substantially modify, destroy or isolate an area of important habitat for the Oriental Cuckoo; • result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the Oriental Cuckoo; or • seriously disrupt the lifecycle of an ecologically significant proportion of the population of the Oriental Cuckoo.
Rainbow Bee-eater (Merops ornatus)	This species was recorded during recent surveys undertaken by Naturecall (pers. comm.) within the Action area or surrounds. ALA (2017) shows that records of the Rainbow Bea-eater are widespread across Australia. This species is highly mobile and is likely to use the greater extent of habitat in the wider locality (DEE, 2017a; ALA, 2017). The works to be undertaken within the Action area are not likely to have a significant impact on Rainbow Bea-

Species	Impact
	eater, given they would not: • substantially modify, destroy or isolate an area of important habitat for the Rainbow Bea-eater; • result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the Rainbow Bea-eater; or • seriously disrupt the lifecycle of an ecologically significant proportion of the population of the Rainbow Bea-eater.
Black-faced Monarch (Monarcha melanopsis)	This species was not recorded during recent surveys undertaken by Naturecall (pers. comm.) within the Action area or surrounds. ALA (2017) shows that records of the Black-faced Monarch are widespread across Eastern Australia. This species mainly occurs in rainforest ecosystems, including semi-deciduous vine-thickets, complex notophyll vine-forest, tropical (mesophyll) rainforest, (DEE, 2017a). The works to be undertaken within the Action area are not likely to have a significant impact on Black-faced Monarch, given they would not: • substantially modify, destroy or isolate an area of important habitat for the Black-faced Monarch; • result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the Black-faced Monarch; or • seriously disrupt the lifecycle of an ecologically significant proportion of the population of the Black-faced Monarch.
Yellow Wagtail (Motacilla flava)	This species was not recorded during recent surveys undertaken by Naturecall (pers. comm.) within the Action area or surrounds. ALA (2017) shows that records of this species scattered across coastal areas of Australia. The works to be undertaken within the Action area are not likely to have a significant impact on Yellow Wagtail, given they would not: • substantially modify, destroy or isolate an area of important habitat for the Yellow Wagtail; • result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the Yellow Wagtail; or • seriously disrupt the lifecycle of an ecologically significant proportion of the population of the Yellow Wagtail.

Species	Impact
Satin Flycatcher (Myiagra cyanoleuca)	This species was not recorded during recent surveys undertaken by Naturecall (pers. comm.) within the Action area or surrounds. ALA (2017) shows that records of the Satin Flycatcher are widespread in Eastern Australia. This species is highly mobile and is known to use the greater extent of habitat in the wider locality (DEE, 2017a; ALA, 2017). The works to be undertaken within the Action area are not likely to have a significant impact on Satin Flycatcher, given they would not: • substantially modify, destroy or isolate an area of important habitat for the Satin Flycatcher; • result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the Satin Flycatcher; or • seriously disrupt the lifecycle of an ecologically significant proportion of the population of the Satin Flycatcher.
Rufous Fantail (Rhipidura rufifrons)	This species was not recorded during recent surveys undertaken by Naturecall (pers. comm.) within the Action area or surrounds. This species mainly inhabits wet sclerophyll forests, often in gullies dominated by eucalypts such as Tallow-wood (Eucalyptus microcorys), Mountain Grey Gum (E. cypellocarpa), Narrow-leaved Peppermint (E. radiata) (DEE, 2017a). The works to be undertaken within the Action area are not likely to have a significant impact on Rufous Fantail, given they would not: • substantially modify, destroy or isolate an area of important habitat for the Rufous Fantail; • result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the Rufous Fantail; or • seriously disrupt the lifecycle of an ecologically significant proportion of the population of the Rufous Fantail.
Great Egret, White Egret (Ardea alba)	This species was not recorded during recent surveys undertaken by Naturecall (pers. comm.) within the Action area or surrounds. The Great Egret occurs in a wide range of wetland habitats (for example inland and coastal, freshwater and saline, permanent and ephemeral, open and vegetated, large and small, natural and artificial) (DEE, 2017a). The

Species	Impact
	works to be undertaken within the Action area are not likely to have a significant impact on Great Egret, given they would not: • substantially modify, destroy or isolate an area of important habitat for the Great Egret; • result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the Great Egret; or • seriously disrupt the lifecycle of an ecologically significant proportion of the population of the Great Egret.
Cattle Egret (Ardea ibis)	This species was not recorded during recent surveys undertaken by Naturecall (pers. comm.) within the Action area or surrounds. The Cattle Egret occurs in tropical and temperate grasslands, wooded lands and terrestrial wetlands (DEE, 2017a). The works to be undertaken within the Action area are not likely to have a significant impact on Cattle Egret, given they would not: • substantially modify, destroy or isolate an area of important habitat for the Cattle Egret; • result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the Cattle Egret; or • seriously disrupt the lifecycle of an ecologically significant proportion of the population of the Cattle Egret.
Latham's Snipe, Japanese Snipe (Gallinago hardwickii)	This species was not recorded during recent surveys undertaken by Naturecall (pers. comm.) within the Action area or surrounds. ALA (2017) shows that records of Latham's Snipe are widespread throughout the remainder of Eastern Australia. Latham's Snipe is a non-breeding visitor/passage migrant to Australia and breeds in the northern-hemisphere (DEE, 2017a). The works to be undertaken within the Referral area are not likely to have a significant impact on Latham's Snipe, given they would not: • substantially modify, destroy or isolate an area of important habitat for Latham's Snipe; • result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for Latham's Snipe; or • seriously disrupt the lifecycle of an ecologically significant proportion of the

Species	Impact
	population of Latham's Snipe.
Osprey (Pandion haliaetus)	This species was not recorded during recent surveys undertaken by Naturecall (pers. comm.) within the Action area or surrounds. ALA (2017) shows that records of the Osprey are widespread throughout the remainder of coastal Australia. The works to be undertaken within the Referral area are not likely to have a significant impact on the Osprey, given they would not: • substantially modify, destroy or isolate an area of important habitat for the Osprey; • result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the Osprey; or • seriously disrupt the lifecycle of an ecologically significant proportion of the population of the Osprey.

2.5.2 Do you consider this impact to be significant?

No

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

No

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

No

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

No

2.9 Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal/gas/mining?

Yes

2.9.1 Impact table

Water Resource	Impact

Surface Water – Watercourses (e.g. Roper Creek, Thirteen Mile Gully).	Negligible. Neither Roper Creek or Thirteen Mile Gully will be directly impacted by the Western Extension Project. Mine affected water storages on-site at the Middlemount Coal Mine will continue to be maintained consistent with designs based on consequence category assessments for regulated structures. Minimising uncontrolled discharges in wet periods remains a specific objective for mine-affected water at the Middlemount Coal Mine. As described further below, impacts on groundwater (alluvial/tertiary aquifers) which may consequently have an indirect impact on such watercourses (e.g. baseflow reductions) are indiscernible and insignificant, when compared to the existing/approved impacts of Middlemount Coal Project Stage 2 (EPBC 2010/5394), the Arrow Bowen Gas Project (EPBC 2012/6377) and other neighbouring mine sites. Post-mining, the final voids will, consistent with the existing/approved impacts of the Middlemount Coal Project Stage 2 (EPBC 2010/5394), act as a groundwater sink. The minimised surface catchment reporting to the final voids post-mining will be approximately 574 ha. This is approximately 1.5% of the total catchment area (~37,720 ha) of Roper Creek immediately downstream of its confluence with Thirteen Mile Gully. The DNRM has confirmed that none of the surface water resources within the extent of the Western Extension Project disturbance footprint are watercourses and are therefore only considered as other ‘drainage features’ under the Water Act.
Surface Water – Other Drainage Features	Material, but insignificant. Photographs looking along the drainage features within the Western Extension Project disturbance footprint are provided in Plates 1 and 2. Upslope diversions will be designed and constructed to convey up-catchment water associated with the other drainage features around the disturbance footprint to the downstream watercourses. The additional surface disturbance area associated with the Action would excise a maximum of 495.1 ha during operations from the catchment area of the former Thirteen Mile Gully and other associated drainage features, and 77.9 ha from

Water Resource	Impact
	the catchment area of an unnamed drainage line to the east of the East Dump. This represents approximately 9% 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) and approximately 4% of the total catchment area of the unnamed drainage line (~1,920 ha). As described above, the DNRM has confirmed that all of the surface water resources within the extent of the Western Extension Project are not watercourses and therefore considered as other 'drainage features' under the Water Act.
Groundwater – Alluvial/Tertiary Aquifers	Indiscernible and insignificant, when compared to the existing/approved impacts of Middlemount Coal Project Stage 2 (EPBC 2010/5394), the Arrow Bowen Gas Project (EPBC 2012/6377) and other neighbouring mine sites. Notwithstanding, a groundwater assessment (including numerical modelling) will be prepared for the purposes of the EP Act and the Water Act to quantify the impacts on the water resource. MCPL has implemented an extensive groundwater monitoring bore network, located both within and outside of the Middlemount Coal Mine tenements. A number of groundwater monitoring bores focus on the Tertiary aquifers (MW2, MW3, MW6, MW9A, MW10A, MW11A, MW12A, MW13A, MW14A and MW15A). Depth to water in the monitoring bores ranges from 7.7 metres below ground level (mbgl) (MW15A) to 25.3 mbgl (MW9A), with an average depth of 17.5 mbgl. Groundwater quality is generally poor and either unsuitable or marginal for beneficial uses. This is supported by no records (within approximately 10 km of the Middlemount Coal Mine) in the DNRM registered bore database of any bores screened within the Tertiary aquifer. The average electrical conductivity is greater than 20,000 microSiemens per centimetre (uS/cm) and contains elevated chloride, sodium and total dissolved solids (TDS).
Groundwater – Permian Aquifers	Material, but insignificant when compared to the existing/approved impacts of Middlemount Coal

Water Resource	Impact
	Project Stage 2 (EPBC 2010/5394), the Arrow Bowen Gas Project (EPBC 2012/6377) and other neighbouring mine sites. Notwithstanding, a groundwater assessment (including numerical modelling) will be prepared for the purposes of the EP Act and the Water Act to quantify the impacts on the water resource. MCPL has implemented an extensive groundwater monitoring bore network, located both within and outside of the Middlemount Coal Mine tenements principally in the Permian aquifers (MW1P*, MW4, MW5, MW5M/P, MW7M/P, MW8FR and MW9M/P). *Excavated within advancing open cut. The average depth to groundwater in the Permian aquifer is greater than 30 mbgl. Similar to the Tertiary aquifers, groundwater quality is generally poor and either unsuitable or marginal for beneficial uses. The average electrical conductivity is greater than 20,000 uS/cm and contains elevated chloride, sodium and TDS.
Groundwater – Groundwater Dependent Ecosystems	Negligible, when considering the depth to groundwater table (discussed below) and that the impacts to alluvial/tertiary aquifers are indiscernible and insignificant, when compared to the existing/approved impacts of Middlemount Coal Project Stage 2 (EPBC 2010/5394), the Arrow Bowen Gas Project (EPBC 2012/6377) and other neighbouring mine sites. While desktop mapping of potential groundwater dependent ecosystems through-out Qld (Bureau of Meteorology, 2017) indicates that areas with high, moderate and low potential for groundwater interaction occur within the Project locality, the majority of the ecosystems are unlikely to be groundwater dependent because: - The terrestrial vegetation associated with Roper Creek and other drainage features also occurs more widely across the landscape and is not restricted to areas where it could potentially access groundwater. There are small areas of RE 11.3.25 along Roper Creek which contains Queensland Blue Gum (Eucalyptus tereticornis) and River Oak (Casuarina cunninghamiana) which are sometimes reliant on access to

Water Resource	Impact
	groundwater, however, the groundwater levels adjacent to Roper Creek range between 18.9 mbgl and 22.7 mbgl. Based on the depth to groundwater surrounding Roper Creek being around 20 mbgl it is unlikely that these communities would be reliant on access to groundwater. This is supported by the following existing conditions: • The ephemeral nature of the aquatic habitat associated with Roper Creek and other drainage features. • There is no evidence that any terrestrial vegetation surrounding the Western Extension Project area has experienced any impacts (i.e. dieback) from the existing operations. Notwithstanding, terrestrial vegetation and aquatic habitat associated with palustrine wetlands north of ML 70417 and ML 70379 could potentially be reliant on groundwater given the RE mapped in these areas by Department of Science, Information Technology and Innovation (DSITI) (2017). DSITI (2017) has mapped these areas as RE 11.3.27, which contains River Red Gum (Eucalyptus camaldulensis) and Queensland Blue Gum, both species that could be reliant on subsurface expression of groundwater to some degree. The nearest shallow (tertiary) water level data available for this area north of the ML 70417 and ML 70379 is that for monitoring bore MW10A in which the water level has ranged between 12.1 m (June 2015) and 12.8 (Dec 2016) and has subsequently been dry for the two monitoring events in 2017 (i.e. the water level is below the base of the bore).
Groundwater - Stygofauna	Negligible. The potential for stygofauna habitat within the Western Extension Project disturbance footprint is unlikely given the average salinity in both the Tertiary and Permian aquifers being in excess of 20,000 uS/cm, and the average depth to groundwater in the Permian aquifer being greater than 30 m below ground surface. 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).

2.9.2 Do you consider this impact to be significant?

No

2.10 Is the proposed action a nuclear action?

No

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

No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage Place Overseas?

No

2.13 Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal/gas/mining?

Yes

2.13.1 Describe the nature and extent of the likely impact on the whole of the environment.

Question 2.13 asks "Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal/gas/mining?". Please refer to Section 2.9.1.

2.13.2 Do you consider this impact to be significant?

No

Section 3 - Description of the project area

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed in Section 2).

3.1 Describe the flora and fauna relevant to the project area.

Threatened flora and fauna species that are known to occur or could potentially occur within the Action area are summarised in Section 2.4. The general kinds of flora and fauna that occur in the Action area and surrounds are summarised below.

Flora surveys have been undertaken within the Action area and surrounds by Naturecall (pers. comm.). Survey techniques included ground-truthing of the *Remnant Regional Ecosystem Map* (DSITI, 2017) (Figure 5), searches for listed threatened ecological communities, and targeted searches for threatened species.

Fauna surveys and habitat assessments have also been undertaken within the Action area surrounds by Naturecall (pers. comm.). Survey techniques consisted of active searches, bird surveys, spotlighting, call play-back, bat call detection, passive infrared cameras, Koala Spot Assessment Technique and herpetofauna surveys (Naturecall, pers. comm.).

Threatened species and communities potentially impacted by the works to be undertaken within the Action area are summarised in Section 2.4.

REs mapped by Naturecall (pers. comm.) within the Action area and surrounds are shown on Figure 5.

Vertebrate fauna species located within the Action area and surrounds are represented by amphibians, reptiles (including skinks, snakes and geckos), birds (both migratory and non-migratory) and mammals (including microbat species) (Naturecall, pers. comm.).

The EPBC Act Protected Matters Search tool identified a number of introduced species that could potentially occur within the Referral area and the area surrounding the Referral area. These included, but were not limited to, the Cane Toad (*Bufo marinus*), Cat (*Felis catus*), Rabbit (*Oryctolagus cuniculus*), Pig (*Sus scrofa*) and Red Fox (*Vulpes vulpes*) (DEE, 2017b).

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

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

There are two unnamed drainage features in the additional surface disturbance area associated with the Action. The DNRM has confirmed that neither of these features are watercourses and are therefore only considered as other 'drainage features' under the Water Act.

The Middlemount Coal Project Stage 2 Project (2010/5394) included a diversion to divert runoff following rainfall events from Thirteen Mile Gully to Roper Creek (Figure 2). As part of the Action, MCPL proposes to realign the diversion to allow for access to the additional coal resources within the ML 70379 (Figure 3).

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

The Action area contains three Land Zones as per Wilson and Taylor (2012). Alluvial formations associated with Thirteen Mile Gully and the unnamed drainage line fall in to Land Zone 3 which is defined as recent Quaternary alluvial systems. This zone typically comprises fertile alluvial soils including Vertosols and Sodosols.

The Action area also contains areas of low lying clay plains which fall into Land Zone 4, described as Tertiary – early Quaternary clay plains. This zone largely comprises vertosols with gilgai microrelief.

The level sandy plains which cover the majority of the Action area fall into Land Zone 5 which as described as Tertiary to early Quaternary loams and sandy plains and plateaus. In western Qld, this land zone typically contains sandy to loamy red Kandosols and Tenosols (Wilson and Taylor, 2012).

REs mapped by Naturecall (pers. comm.) within the Action area and surrounds are shown on Figure 5. Dominant REs in the Action area are:

RE 11.5.3 (*Eucalyptus populnea* +/- *E. melanophloia* +/- *Corymbia clarksoniana* woodland on Cainozoic sand plains).

RE 11.3.2 (*Eucalyptus populnea* woodland on alluvial plains).

RE 11.3.1 (*Acacia harpophylla* and/or *Casuarina cristata* open forest on alluvial plains).

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.

Vegetation mapped within the Action area is listed in Section 3.3 and shown on Figure 5.

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 typically ranging from approximately 160 to 170 m AHD.

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

The area of additional surface disturbance associated with the Action is predominantly located on freehold land owned by MCPL (Figure 4), which is currently used for low intensity cattle grazing under an agistment agreement.

Lot 3, SP282156 and Lot 2, SP248577, which partially overlap the area of additional surface disturbance associated with the Action, are listed on the EHP's Environmental Management Register as having livestock dips or spray races. Plans of these lots provided by the EHP indicate that the closest record (a dip site) is located approximately 2 km west of the area of additional surface disturbance associated with the Action.

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 area.

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

3.9 Describe any Indigenous heritage values relevant to the project area.

MCPL has approved CHMPs in place with the Barada Barna People and the BBKY #4 native title claimants. Management of Aboriginal cultural heritage would continue to be conducted in accordance with the CHMPs. The Action area is only relevant to the CHMP with the Barada Barna People, which would be reviewed and amended where required to include the Action area.

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

The area of additional surface disturbance associated with the Action would involve development within ML 70379 and a MLA (Figure 3). The area of additional surface disturbance associated with the Action is located on the following freehold lots (owned by MCPL) and easements (Figure 4):

Lot 2, SP248577.

Lot 5, SP210524.

Lot 3, SP282156.

Lot D, CNS136.

In addition to these lots above, the Barwon Park - Middlemount Road traverses the area of 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 Action area is located on freehold land owned by MCPL which is currently used for low intensity cattle grazing under an agistment agreement. The natural topography is relatively flat, with an elevation typically ranging from approximately 160 to 170 m AHD.

The Barwon Park - Middlemount Road traverses the Action area. This is an unformed road that is mapped as a travelling stock reserve. MCPL has previously reached compensation agreements with the Isaac Regional Council to close part of the stock route within MLs associated with the Action area. MCPL would seek to reach a similar compensation agreement with the Isaac Regional Council to address the part of the stock route that traverses the Action area.

Section 4 - Measures to avoid or reduce impacts

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

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

Biodiversity

The potential impacts to biodiversity would be minimised through avoidance, minimisation of clearance, conducting clearance in accordance with the Species Management Program, mitigation such as rehabilitation of the Action area in accordance with rehabilitation objectives and through environmental offsets under the *Environmental Offsets Act*, 2014 and *Queensland Environmental Offsets Policy* (EHP, 2016).

Management measures specific to Matters of National Environmental Significance (MNES) are outlined below.

Species: Ornamental Snake (*Denisonia maculata)*

Proposed Management Measures: Potential impacts to the Ornamental Snake would be minimised through implementation of the following measures:

Education of staff, including contractors, in relation to the risks of fauna injury and deaths and how to manage animals which are injured or displaced, including threatened species.

MCPL would implement the use of a licensed spotter-catcher and/or carer during clearing activities.

Progressive rehabilitation of disturbance areas.

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

Proposed Management Measures: Potential impacts to the Squatter Pigeon would be minimised through implementation of the following measures:

Education of staff, including contractors, in relation to the risks of fauna injury and deaths and how to manage animals which are injured or displaced, including threatened species.

MCPL would implement the use of a licensed spotter-catcher and/or carer during clearing activities.

Progressive rehabilitation of disturbance areas.

Species: Greater Glider (*Petauroides volans*)

Proposed Management Measures: Potential impacts to the Greater Glider would be minimised through implementation of the following measures:

Education of staff, including contractors, in relation to the risks of fauna injury and deaths and how to manage animals which are injured or displaced, including threatened species.

MCPL would implement the use of a licensed spotter-catcher and/or carer during clearing activities.

Progressive rehabilitation of disturbance areas.

Species: Koala (*Phascolarctos cinereus)*

Proposed Management Measures: Potential impacts to the Koala would be minimised through implementation of the following measures:

Education of staff, including contractors, in relation to the risks of fauna injury and deaths and how to manage animals which are injured or displaced, including threatened species.

MCPL would implement the use of a licensed spotter-catcher and/or carer during clearing activities.

Progressive rehabilitation of disturbance areas.

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

Proposed Management Measures: Potential impacts to the Corben’s Long-eared Bat would be minimised through implementation of the following measures:

Education of staff, including contractors, in relation to the risks of fauna injury and deaths and how to manage animals which are injured or displaced, including threatened species.

MCPL would implement the use of a licensed spotter-catcher and/or carer during clearing activities.

Progressive rehabilitation of disturbance areas.

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

Proposed Management Measures: Potential impacts to Brigalow EEC would be minimised through implementation of the following measures:

Boundaries of areas to be cleared, and those not to be cleared, would be defined during construction and operation.

Weed management techniques would be implemented as required (e.g. washdown of machinery when moving from weed infested areas).

Water

A Water Management Plan for the Middlemount Coal Mine (WRM, 2016) has been prepared in accordance with the EA conditions. The Water Management Plan includes a study of potential contaminants, a water balance model, a description of the site water management system, measures to manage and prevent saline and acid rock drainage, contingency procedures for emergencies and a monitoring and review program for the effectiveness of the water management plan.

An extensive surface water and groundwater monitoring network has been established at the Middlemount Coal Mine and would be augmented to incorporate the Action.

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.

The Action is not considered to be a controlled action as it will not significantly impact any Matters of National Environmental Significance as outlined in Section 2.

Section 5 – Conclusion on the likelihood of significant impacts

A checkbox tick identifies each of the matters of National Environmental Significance you identified in section 2 of this application as likely to be a significant impact.

Review the matters you have identified below. If a matter ticked below has been incorrectly identified you will need to return to Section 2 to edit.

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

No

5.1.5 Listed migratory species

No

5.1.6 Commonwealth marine environment

No

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

5.1.9 A water resource, in relation to coal/gas/mining

No

5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

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.

The Action is not considered to be a controlled action as it will not significantly impact any Matters of National Environmental Significance as outlined in Section 2.

Section 6 – Environmental record of the person proposing to take the action

Provide details of any proceedings under Commonwealth, State or Territory law against the person proposing to take the action that pertain to the protection of the environment or the conservation and sustainable use of natural resources.

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

Yes, MCPL has a strong record of compliance with its environmental obligations under EA EPML00716913 (as modified). MCPL has established and is committed to continuing open and constructive dialogue with the local community and stakeholders regarding environmental management as part of their operations.

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.

N/A

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

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

Our Aim

At Middlemount Coal, we are committed to maintaining a sustainable balance between economic development and the protection of the natural environment. Our goal is to not only meet our environmental and cultural heritage obligations, but strive to exceed in all facets, therefore ensuring the protection of our environmental values within the Middlemount Mine as well as our surrounding communities.

Our Objectives

Our Environment and Cultural Heritage Management System includes but is not limited to:

Planning work activities so as to meet all environmental, sustainability and cultural heritage legislation and guidelines.

Operating an environmentally sound and cultural aware business.

Reporting and recording environmental practices, including greenhouse gas emissions, as part of our environmental and quality management system.

Reviewing and auditing our environmental procedures to enable continual improvement.

Our Commitment

Middlemount Coal is committed to:

Comply with legislation concerned with the production, minimisation and disposal of waste and the control of hazardous substances, dust and industrial noise.

Comply with government acts and requirements for the protection of our cultural heritage.

Comply with legislation and regulations concerned with energy efficiency and greenhouse gas emissions.

Act with due regard for the requirements and expectations of our of all our key stakeholders.

Encourage employee education and participation in improving environmental awareness and practice.

Encourage employee education in cultural heritage awareness.

Implement an environmental audit and reporting system, to continually improve our environmental management system.

Minimise waste generation and dispose of waste responsibly.

Identify opportunities to reduce energy use and greenhouse gas emissions and the subsequent implementation of operational changes in response to opportunities that have been identified.

Rehabilitate areas no longer required for mining processes.

A copy of the Middlemount Coal Mine Environment and Cultural Heritage Policy is available on the Middlemount Coal Mine website.

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

6.4.1 EPBC Act No and/or Name of Proposal.

MCPL has previously referred, and been responsible for undertaking, the following actions under the EPBC Act:

Middlemount Coal Project Stage 2 [EPBC 2010/5394]; and

North-eastern Extension [EPBC 2016/7717]).

Section 7 – Information sources

You are required to provide the references used in preparing the referral including the reliability of the source.

7.1 List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source).

Reference Source	Reliability	Uncertainties
Atlas of Living Australia (2017) Atlas of Living Australia Database Search for the following search area: -22.816342, 148.58875; -22.81919, 148.694838; -22.89575, 148.693465; -22.896698 148.587035 Website: http://spatial.ala.org.au/ Data received: October 2017.	Reliable source of information containing threatened species records, distribution and habitat requirement.	N/A
Bureau of Meteorology (2017) Groundwater Dependent Ecosystems Atlas. Australian Government Website: http://www.bom.gov.au/water/groundwater/gde/map.shtml Accessed: October 2017.	Reliable source of information containing mapping of groundwater dependent ecosystems.	N/A
Department of Environment and Heritage Protection (2016) Queensland Environment Offset Policy.	Published policy prepared by Queensland Department of Environment and Heritage Protection.	N/A
Department of Science, Information Technology and Innovation (2017) Remnant Regional Ecosystem Map -Version 10.0. The Department of Science, Information Technology and Innovation, Brisbane.	Reliable source of desktop information.	N/A
Department of the Environment and Energy (2014) EPBC Act Referral Guideline for the Vulnerable Koala.	Published guideline prepared by the Commonwealth Department of the Environment and Energy.	N/A
Department of the Environment	Reliable source of desktop	N/A

Reference Source	Reliability	Uncertainties
and Energy (2017a) Species Profiles and Threats Database. Website: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl Accessed: October 2017.	information. Website of the Department of Environment and Energy. Contains information on threatened species' distribution, population, life cycle, threats and habitat requirement.	
Department of the Environment and Energy (2017b) Protected Matters Search within the following search area: -22.816342, 148.58875; -22.81919, 148.694838; -22.89575, 148.693465; -22.896698 148.587035. Data Received: October 2017.	Well known database search suggested by the Commonwealth Department of the Environment and Energy to identify potentially occurring MNES.	N/A
Wilson, P.R. and Taylor, P.M. (2012) Land Zones of Queensland. Queensland Herbarium, Queensland Department of Science, Information Technology, Innovation and the Arts, Brisbane.	Reliable source of information published by the Queensland Herbarium.	N/A
WRM Water and Environment (2016) Middlemount Mine Water Management Plan.	Reliable. Management plan prepared for the Middlemount Coal Mine.	N/A

Section 8 – Proposed alternatives

You are required to complete this section if you have any feasible alternatives to taking the proposed action (including not taking the action) that were considered but not proposed.

8.0 Provide a description of the feasible alternative?

Alternatives to the proposed Action including the location and design elements have been considered by MCPL, along with the option of not proceeding with the Action. An overview of some considerations is provided below:

Action location – The presence of the existing open cut mining area, the extent of current mining tenements, land tenure and the presence of existing approved offset areas to the west of the Middlemount Coal Action determines the location of the Action.

Design elements – The Action would result in changes to the existing final void in the northern area of the open cut extent, and creation of an additional final void in the southern area of the open cut extent, upon completion of mining operations (Figure 3). This proposed final void arrangement is generally in accordance with the MCPL Residual Void Study (December 2014) submitted to EHP in January 2015. Filling the final void was considered, however, the cost to rehandle spoil material from the out of pit emplacements to the final voids would be prohibitive and delay rehabilitation, and as such, it is not proposed as part of the Action.

No Action – MCPL has considered not undertaking the Action. However, in the event that the Action is not developed, MCPL would forgo opportunities to improve mining efficiency and rehabilitation outcomes at the Middlemount Coal Mine.

8.1 Select the relevant alternatives related to your proposed action.

8.27 Do you have another alternative?

No

Section 9 – Contacts, signatures and declarations

Where applicable, you must provide the contact details of each of the following entities: Person Proposing the Action; Proposed Designated Proponent and; Person Preparing the Referral. You will also be required to provide signed declarations from each of the identified entities.

9.0 Is the person proposing to take the action an Organisation or an Individual?

Organisation

9.2 Organisation

9.2.1 Job Title

Environmental Manager

9.2.2 First Name

Shane

9.2.3 Last Name

Flint

9.2.4 E-mail

sflint@middlemountcoal.com.au

9.2.5 Postal Address

PO Box 24
Middlemount QLD 4746
Australia

9.2.6 ABN/ACN

ABN

49122348412 - MIDDLEMOUNT COAL PTY LTD

9.2.7 Organisation Telephone

0749850059

9.2.8 Organisation E-mail

sflint@middlemountcoal.com.au

9.2.9 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

Not applicable

Small Business Declaration

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small a business entity and confirm that I qualify for a small business exemption.

Signature:..... Date: .....

9.2.9.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations

No

9.2.9.3 Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made

Person proposing the action - Declaration

I, SHANE FLINT, 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 of or for the benefit of any other person or entity.

Signature: Shane Flint Date: 22/12/2017

I, _____, the person proposing the action, consent to the designation of _____ as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature:..... Date: .....

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

Environmental Manager

9.5.2 First Name

Shane

9.5.3 Last Name

Flint

9.5.4 E-mail

sflint@middlemountcoal.com.au

9.5.5 Postal Address

PO Box 24
Middlemount QLD 4746
Australia

9.5.6 ABN/ACN

ABN

49122348412 - MIDDLEMOUNT COAL PTY LTD

9.5.7 Organisation Telephone

0749850059

9.5.8 Organisation E-mail

sflint@middlemountcoal.com.au

Proposed designated proponent - Declaration

I, SHANE FLINT, 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: .....22/12/2017.....

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Environmental Manager

9.8.2 First Name

Shane

9.8.3 Last Name

Flint

9.8.4 E-mail

sflint@middlemountcoal.com.au

9.8.5 Postal Address

PO Box 24
Middlemount QLD 4746
Australia

9.8.6 ABN/ACN

ABN

49122348412 - MIDDLEMOUNT COAL PTY LTD

9.8.7 Organisation Telephone

0749850059

9.8.8 Organisation E-mail

sflint@middlemountcoal.com.au

Referring Party - Declaration

I, SHANE FLINT, I 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: Shane Flint Date: 22/12/2017

Appendix A - Attachments

The following attachments have been supplied with this EPBC Act Referral:

1. approxextent_additionalsurfacedisturbance.zip
2. figures_and_plates_21.12.17.zip