

# Millmerran Mining Lease Conversion Project

Application Number: **01293**Commencement Date: **23/06/2022**Status: **Locked**

## 1. About the project

### 1.1 Project details

#### 1.1.1 Project title \*

Millmerran Mining Lease Conversion Project

#### 1.1.2 Project industry type \*

Mining

#### 1.1.3 Project industry sub-type

Coal

#### 1.1.4 Estimated start date \*

1/09/2024

#### 1.1.4 Estimated end date \*

1/08/2056

## 1.2 Proposed Action details

### 1.2.1 Provide an overview of the proposed action, including all proposed activities. \*

The project is owned by MPP and is located south of the township of Millmerran, and 80 km southwest of Toowoomba. The Millmerran Power Project describes the combined Millmerran Power Station and Commodore Coal Mine which currently operates in partnership. The Commodore Coal Mine operates on Mining Lease (ML) 50151 under Environmental Authority (EA) EPM00841513 and produced coal for the adjacent 870-megawatt (MW) Millmerran Power Station through open cut mining methods.

The proposed action involves the continuation of mining and processing of reserves contained within the Commodore coal deposit with the inclusion of two new resource areas within MDL 301, immediately adjacent (east) of ML 50151 and a portion of MDL 299 to the northwest of the ML 50151. The proposed action aims to enable MPP to extend Life of Mine (LOM) beyond 2036 and to maintain current tonnage rates by mining Pit H within MDL301 and Pit I within MDL 299. Expansion of Commodore Coal Mine through the conversion of MDL 301 and MDL 299 required approval for the increase to disturbance. ML Application (MLA) 700072 was lodged in December 2021.

The key elements of the proposed action will include:

- Up to 4.0 Mtpa of thermal coal produced solely for the Millmerran Power Station
- Production of approximately 1.2 million tonnes per annum (Mtpa) ash (minus approximately 25% processed through an on-site beneficiation plant and transported offsite for recycling).
- Open cut truck and excavator operation (with dozer push).
- Run-of-Mine (ROM) coal will be transported to the Millmerran Power Station via an overland conveyor belt (1,500 tonnes/hour).
- ROM Coal is stored adjacent to the Millmerran Power Station (active (100kt) and emergency stockpiles (25kt)).
- Use existing facilities as much as possible, such as the existing Mine Industrial Area.
- Development of enabling infrastructure that includes:
  - Dedicated haul roads from Pit H to Pit I to connect to the existing haul roads on ML 50151.
  - Diversion of Gillespie's Dam Road located in MDL 301 and Millmerran Inglewood Road located in MDL 299.
  - Out-of-Pit-Dump (OOPD) north of MDL 301.
  - Additional fencing to surrounding mining activities.

- Additional water management infrastructure (levees, sediment dams, contours etc.)
- Culverts for operational surface water management
- Recycled water pipeline (owned by MPP) diversion.
- Temporary crib huts, water fill points and sediment controls.
- Continuation use of existing infrastructure including:
  - Overland conveyor belt to transport RPM coal to Millmerran Power Station (1,500 to 1,800 tonnes per hour).
  - Existing haul roads within ML 50151
  - Site access from Kooroongarra Road, and
  - On-site and off-site infrastructure to support coal production from the new project area (Mine Industrial Area, water management infrastructure, telecommunications infrastructure, workshops and office blocks).

The proposed action will allow MPP to continue coal extraction up to 4 Mtpa from the Commodore Coal Mine and utilise existing infrastructure to support the Millmerran Power Station. The proposed action will ensure practices are environmentally sustainable and safe while delivering a post-mining landform that is safe, stable and non-polluting.

The location of the Referral Area and Disturbance Area are outlined in Figure 1 attached.

## 1.2.2 Is the project action part of a staged development or related to other actions or proposals in the region?

No

## 1.2.6 What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant? \*

### **Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act)**

The proposed action is anticipated to be a controlled action requiring assessment and approval under the EPBC Act. The anticipated assessment pathway under the EPBC Act is via the accredited bilateral agreement.

In line with this assessment pathway, the proposed action will be assessed as part of the EIS completed under the Environmental Protection Act 1994 (EP Act). Following completion of the EIS process, the DES will prepare an assessment report.

### **Mineral Resources Act 1989 (MR Act)**

Under the MR Act, the conversion of the ML requires an MLA. the grant of the ML is dependent on the grant of an EA. MLA 700072 was lodged to the Department of Resources (DoR) in December 2021.

### **Environmental Protection Act 1994**

Assessment and approval of mining activities in Queensland is set out in Chapter 5 of the EP Act and administered by the Department of Environment and Science (DES). MPP operates Commodore Coal Mine under EA EPML00841513 (issued under the EP Act). An application to prepare a voluntary EIS was received by DES on 23/8/21, 3/9/21, 8/10/21, 5/11/21 for the action on MDL 301, ML 50151 and MDL 299. As a result of this application, the DES, on 19/11/21 confirmed that an EIS and an EA Amendment are required for the conversation of MDL 301 and a portion of MDL 299.

It is anticipated that the terms of reference (TOR) for the EIS will be finalised in Q3 2022 following the decision on this referral and the required approval pathway.

### **Environmental Offset Act 2014 (EO Act) & Queensland Environmental Offsets Policy 2017 (EO Policy)**

The EO Act provides for offsetting residual impacts on matters of national, State or local environmental significance. Offsets under local, State and Commonwealth jurisdiction can be addressed under an Offsets Delivery Plan (ODP). Offsets are being considered and will be proposed as part of the EIS.

### **Planning Act 2016 (Planning Act)**

A development approval under the Planning Act may be required for off lease road diversions. Gillespie's Dam Road and Millmerran Inglewood Road are Toowoomba Regional Council (TRC) controlled roads and will both be diverted around the new ML. TRC have been consulted and will be responsible for approving the design of road upgrades. Small areas of land outside the existing ML required to facilitate other earthworks associated with the action will require a development approval under the Planning Act. MPP will continue to engage with TRC to determine the approvals and permits expectations requirements.

### **Transport Infrastructure Act 1994 (Transport Infrastructure Act)**

The Transport Infrastructure Act provides for the planning and management of transport infrastructure. The Department of Transport and Main Roads (DTMR) will be engaged during approvals processes for Gillespie's Dam Road and Millmerran Inglewood Road diversions to ensure compliance with the Transport Infrastructure Act. The Inland Rail corridor runs through the site in the north. Management of this will be subject to an agreement between MPP and Inland Rail proponents.

### **Native Title Act 1993 (NT Act)**

The NT Act provides recognition for the rights and interests over land and water possessed by Australian Indigenous people under traditional laws and customs. The NT Act sets out processes that must be followed for any 'future act' on land or waters that would affect native title rights and interests.

#### **Aboriginal Cultural Heritage Act 2003 (ACH Act)**

The ACH Act provides for the recognition, protection, and conservation of Aboriginal cultural heritage in Queensland. The duty of care outlined in Section 23 of the ACH Act required land users to take all reasonable and practicable measures to ensure their activity does not harm Aboriginal Cultural Heritage. MPP will prepare a new Cultural Heritage Management Plan (CHMP) for the proposed action prior to disturbance, under which cultural heritage matters will be managed.

#### **Regional Interests Development Approval**

The Project is within a PAA and SCA and as such may require Regional Interests Development Approval (RIDA). An exemption under the RPI Act Section 22 from the requirement for RIDA may apply provided there is agreement with the landholder. MPP will seek this approval in parallel to approvals outlined above.

### **1.2.7 Describe any public consultation that has been, is being or will be undertaken regarding the project area, including with Indigenous stakeholders. Attach any completed consultation documentations, if relevant. \***

MPP Has prepared a stakeholder management plan that incorporated communications practices for the site, including the proposed action. This plan provides for communication with partners, staff, suppliers and the community. This will be included as part of the EIS.

MPP will prepare a new CHMP for the proposed action in consultation with the Indigenous Stakeholders to undertake appropriate pre-disturbance cultural heritage duty of care surveys. The CHMP is currently in development and will be finalised during the EIS process.

There is a Public Notification period (30 business days) required for the proposed action as part of the EIS approval process under the EP Act. This will provide an opportunity for the public to provide feedback on the EIS and is anticipated to occur in Q1 2023. As part of the EIS, MPP will also undertake direct shareholder engagement through public and private forums as appropriate.

MPP is in the process of preparing a Social Impact Assessment (SAI) as part of the EIS process to analyse the positive and negative social consequences of the proposed action.

## **1.3.1 Identity: Referring party**

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**Confirm that you have read and understand this Privacy Notice \***

#### **1.3.1.1 Is Referring party an organisation or business? \***

Yes

Referring party organisation details	
<b>ABN</b>	33084098617
<b>Organisation name</b>	MILLMERRAN POWER MANAGEMENT PTY LTD
<b>Organisation address</b>	Level 31, 345 Queen Street Brisbane QLD 4000
Referring party details	
<b>Name</b>	Shayne King
<b>Job title</b>	Commercial Manager
<b>Phone</b>	0408188051
<b>Email</b>	sking@intergen.com
<b>Address</b>	Level 31, 345 Queen Street, Brisbane QLD 4000

## 1.3.2 Identity: Person proposing to take the action

### 1.3.2.1 Are the Person proposing to take the action details the same as the Referring party details? \*

Yes

Person proposing to take the action organisation details	
<b>ABN</b>	33084098617
<b>Organisation name</b>	MILLMERRAN POWER MANAGEMENT PTY LTD
<b>Organisation address</b>	Level 31, 345 Queen Street Brisbane QLD 4000
Person proposing to take the action details	
<b>Name</b>	Shayne King
<b>Job title</b>	Commercial Manager
<b>Phone</b>	0408188051
<b>Email</b>	sking@intergen.com
<b>Address</b>	Level 31, 345 Queen Street, Brisbane QLD 4000

### 1.3.2.14 Are you proposing the action as part of a Joint Venture? \*

No

**1.3.2.15 Are you proposing the action as part of a Trust? \***

No

**1.3.2.17 Describe the Person proposing the action's history of responsible environmental management including details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the Person proposing to take the action. \***

MPP has an excellent record of responsible environmental management and a strong commitment to continual improvement of environmental performance. MPP has not been subject to any environmental related proceedings in any of the following Courts, High Court, Federal Court, Supreme Court, District Court, and Planning and Environment Court. MPP's approach to environmental management is incorporated in the Charter which outlines 'an overriding commitment to health, safety, environmental responsibility and sustainable development'.

**1.3.3 Identity: Proposed designated proponent****1.3.3.1 Are the Proposed designated proponent details the same as the Person proposing to take the action? \***

Yes

## Proposed designated proponent organisation details

<b>ABN</b>	33084098617
<b>Organisation name</b>	MILLMERRAN POWER MANAGEMENT PTY LTD
<b>Organisation address</b>	Level 31, 345 Queen Street Brisbane QLD 4000

## Proposed designated proponent details

<b>Name</b>	Shayne King
<b>Job title</b>	Commercial Manager
<b>Phone</b>	0408188051
<b>Email</b>	sking@intergen.com
<b>Address</b>	Level 31, 345 Queen Street, Brisbane QLD 4000

**1.3.4 Identity: Summary of allocation****Confirmed Referring party's identity**

The Referring party is the person preparing the information in this referral.

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ABN	33084098617
Organisation name	MILLMERRAN POWER MANAGEMENT PTY LTD
Organisation address	Level 31, 345 Queen Street Brisbane QLD 4000
Representative's name	Shayne King
Representative's job title	Commercial Manager
Phone	0408188051
Email	sking@intergen.com
Address	Level 31, 345 Queen Street, Brisbane QLD 4000

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### Confirmed Person proposing to take the action's identity

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

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Same as Referring party information.

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### Confirmed Proposed designated proponent's identity

The Person proposing to take the action is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

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Same as Person proposing to take the action information.

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## 1.4 Payment details: Payment exemption and fee waiver

### 1.4.1 Do you qualify for an exemption from fees under EPBC Regulation 5.23 (1) (a)? \*

No

### 1.4.3 Has the department issued you with a credit note? \*

No

### 1.4.5 Have you applied for or been granted a waiver for full or partial fees under Regulation 5.21A? \*

No

### 1.4.7 Are you going to apply for a waiver of full or partial fees under EPBC Regulation 5.21A? \*

No

### 1.4.8 Would you like to add a purchase order number to your invoice? \*

No

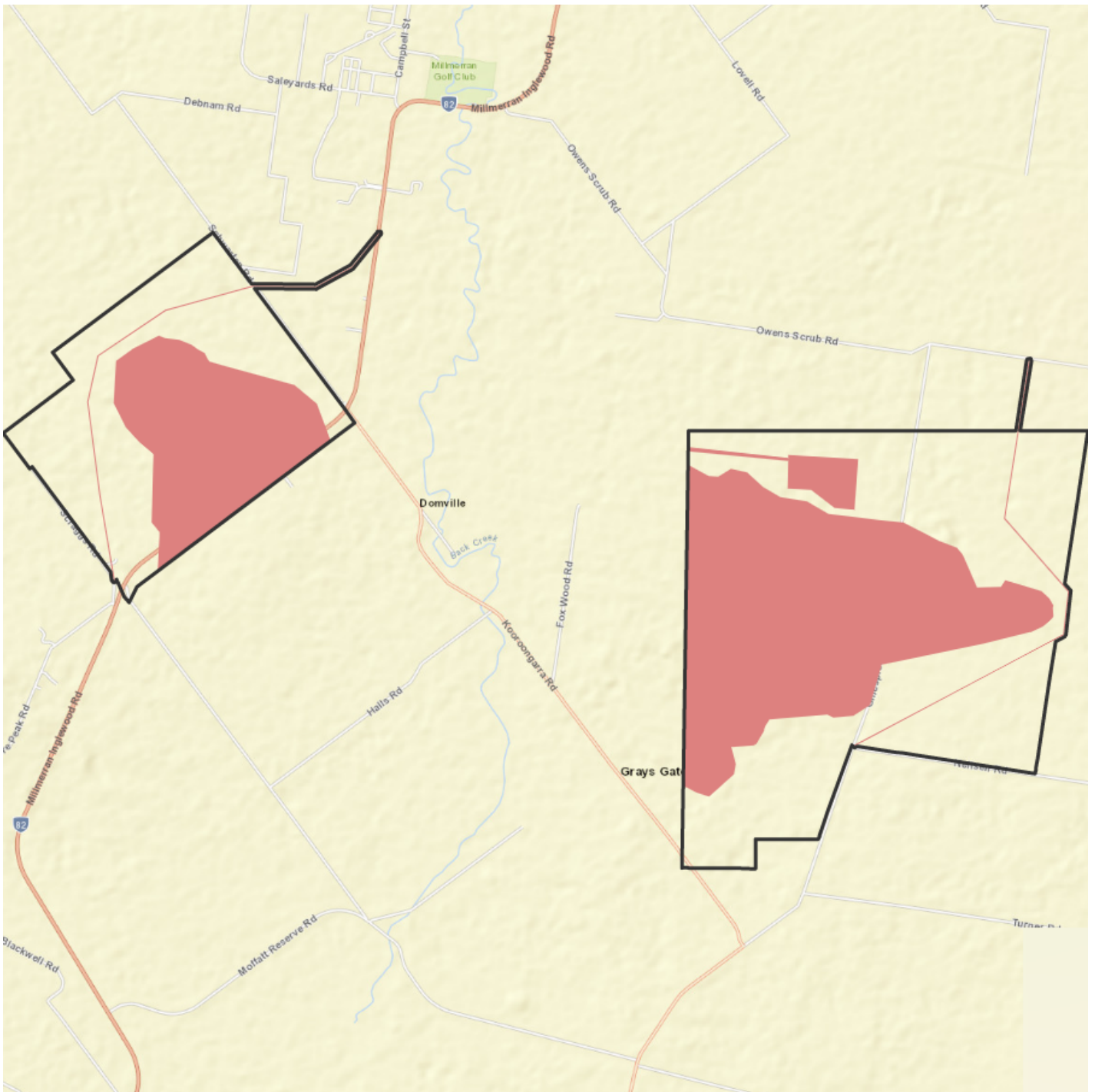
## 1.4 Payment details: Payment allocation

### 1.4.10 Who would you like to allocate as the entity responsible for payment? \*

Person proposing to take the action

## 2. Location

### 2.1 Project footprint



## 2.2 Footprint details

### 2.2.1 What is the address of the proposed action? \*

466 Kooroongarra Road, Grays Gate, QLD 4357

### 2.2.2 Where is the primary jurisdiction of the proposed action? \*

Queensland



**2.2.3 Is there a secondary jurisdiction for this proposed action? \***

No

**2.2.5 What is the tenure of the action area relevant to the project area? \***

The Referral Area is located on ML 50151m MDL 299 and MDL 301. Refer to Figure 2.

The Referral Area is located on the following land parcels:

- Lot 4 on SP260880 (Freehold)
- Lot 3840 on DER34142 (Freehold)
- Lot 148 on DER34181 (Freehold)
- Lot 113 on DY410 (Freehold)
- Lot 3841 on DER34142 (Freehold)
- Lot 2 on RP16094 (Freehold)
- Lot 33 on ML542 (Freehold)
- Lot 1 on RP43591 (Freehold)
- Lot 85 on DY476 (Freehold)
- Lot 4 on SP127261 (Freehold)
- Lot 3 on SP260880 (Freehold)
- Lot 2 on DY1006 (Freehold)
- Lot 1 on RP16094 (Freehold)
- Lot 3 on M34842 (Freehold)
- Lot 2 on M34842 (Freehold)
- Lot 1 on SP260880 (Freehold)
- Lot 109 on DY241 (Freehold)
- Lot 4 on RP22799 (Freehold)
- Lot 9 on M341172 (Freehold)
- Lot 3 on SP260880 (Freehold)
- Lot 11 on SP169291 (Freehold)
- Lot 3778 on DER 34132 (Freehold)
- Lot 141 on ML542 (Freehold)
- Lot 3845 on DER34142 (Freehold)
- Lot 115 on DY410 (Freehold)
- Lot 108 on DY897 (Freehold)

## 3. Existing environment

### 3.1 Physical description

**3.1.1 Describe the current condition of the project area's environment.**

Land adjacent to and underlying the MDL's is owned by MPP and is used for cropping and cattle grazing. The Referral Area comprises limited remnant and regrowth vegetation. Vegetation in the MDL 299 portion of the Referral Area is predominantly associated with a tributary of Back Creek that intersects MDL 299. Isolated vegetation fragments in MDL 301 are associated with lower catchment order creeks and an area (single stand) of remnant vegetation in the west of MDL 301. The area is intersected by non-remnant disturbed areas including access tracks, pipelines, existing creek diversions and active mining areas of the CCM.

Downstream areas include riparian corridors along Back Creek and other minor watercourses. The condition of riparian corridor along stream order 3 unnamed tributary of Back Creek running through MDL 29 is predominantly degraded with impacts associate with cattle access evident along both banks and in the bed of the waterway. An intact remnant riparian corridor present along this waterway, although weed incursion, erosion and grazing disturbances were evident along the creek.

**3.1.2 Describe any existing or proposed uses for the project area.**

The Referral Area is located adjacent to the east of ML 50151 and MDL 301 and to the west on part of MDL 299. Activities throughout the area will allow for the continuation of the existing CCM on MDL 50151. The Referral Area will incorporate infrastructure to support CCM including haul roads, sediment dams, ROM coal stockpiles, laydown areas and the waste rock dumps (WRD).

### 3.1.3 Describe any outstanding natural features and/or any other important or unique values that applies to the project area.

There are no outstanding natural features relevant to the Referral Area.

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

The topography of the Referral Area is gently sloping, sloping away from the Condamine flood plain in the west and towards the hilly boundary of the Commodore Catchment in the east. The Referral Area is located at an elevation of approximately 420-440 m Australian Height Datum (mAHD), roughly 60 m above the height of the Condamine River at its nearest point.

## 3.2 Flora and fauna

### 3.2.1 Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.

#### Flora Summary

Ecological surveys conducted by E2M in 2020 (Attachment A) identified 108 flora species within the Referral Area, comprising of 77 native species and 31 introduced species, including two threatened flora species. Belson's panic (*Homopholis belsonii*) is listed as endangered under the EPBC Act and was observed on numerous occasions within the southern portion of MDL 301 and directly adjacent to Millmerran Inglewood Road (Figure 7B, Attachment A). Chinchilla white gum (*Eucalyptus argophloia*) is listed as vulnerable under the EPBC Act and was also observed throughout the Referral Area, however, it was evident that stands of this species has been planted on formerly cleared

land. Hawkweed (*Picris evae*) is listed as vulnerable under the EPBC Act and has previously been recorded within close proximity to the Referral Area. Although the species was not observed during ecological surveys, suitable habitat was mapped based on habitat preferences (Figure 7C, Attachment A).

Canopy species throughout the Referral Area included Eucalypt and Acacia species, including River red gum (*Eucalyptus camaldulensis*), Forest red gum (*E. tereticornis*), Poplar box (*E. populnea*), Moreton Bay ash (*Corymbia tessellaris*), River she-oak (*Casuarina Cunninghiana*) and Rough-barked apple (*Anagophora floribunda*). Sub-canopy and shrub species generally included Ironwood (*Acacia excelsa*), Sally wattle (*A. salicina*), Wilga (*Geijera parviflora*), Currant bush (*Carissa ovata*) and Belah (*Casuarina cristata*). Numerous native forbs and grass species were identified to be present throughout the Referral Area, however ground cover within non-remnant vegetation communities is dominated by exotic pasture or cultivated species.

Three weed species listed as Weeds of National Environmental Significant and/or under the Queensland Biosecurity Act 2014 were recorded within the Referral Area. These included *Harrisia cactus* (*Harrisia martini*), Commonly prickly pear (*Opuntia stricta*) and Velvety tree pear (*Opuntia tomentosa*). Other weeds identified include African lovegrass (*Eragrostis curvula*), Mimosa bush (*Vachellia farnesiana*), and Noogoora burr (*Xanthium occidentale*).

### Fauna Summary

Based on previous records as the availability of suitable habitat within the Referral Area, two EPBC Act threatened species were identified as being likely to occur. Although the nearest record was approximately 2.5km south-west of the Referral Area, suitable habitat for the Koala (*Phascolarctos cinereus*) was field verified to occur within the Referral Area. This included vegetation in MDL 299 associated with the unnamed tributary of Back Creek, in addition to an area in the south-eastern corner of MDL 301 (Figure 9D, Attachment A). The Southern squatter pigeon (*Geophaps scripta scripta*) was not identified during the ecological assessment, however, was identified as being likely to occur. Potential habitat was ground truthed along the tributary of Back Creek in MDL 299 and in three small areas of MDL 301, generally in association with watercourses (Figure 9B, Attachment A).

Filed assessments recorded 34 native fauna species, none of which are listed under the EPBC Act. Three non-native species were also recorded in the Referral Area, including the Feral Pig (*Sus scrofa*), Common myna (*Acridotheres tristis*) and European brown hare (*Lepus europaeus*).

No migratory species were recorded during the survey. However, based on previous records and the availability of suitable aerial foraging habitat over the Referral Area, the white-throated needletail (*Hirundapus caudacutus*), has been identified as likely to migrate through the area.

Refer to Terrestrial Ecology Report (Attachment A).

### 3.2.2 Describe the vegetation (including the status of native vegetation and soil) within the project area.

#### Soils

The on-site soils assessment conducted by SLR (2021) and subsequent laboratory analysis indicated one soil order, Vertosols, within the Referral Area, as assessed using the Revised Australian Soil Classification (Isbell, 2016). Dominant soil types included Crusty Black Vertosols, self-mulching Black Vertosols and crusty Grey Vertosols.

The Vertosols on site generally consisted of very dark brown to black light to light clay A horizons (topsoil) with strong subangular blocky structure, mostly overlying a light medium to medium clay BD horizon with strong subangular blocky structure. The topsoil predominantly showed neutral to slightly acidic, non-sodic, non-saline and moderate effervescent properties. The B2 horizon generally showed alkaline to very strongly alkaline, moderately to highly sodic, moderate saline and highly effervescent properties, typically increasing with depth.

#### Vegetation Communities

The majority of the Referral Area has been subject to historical clearing, livestock impacts, pasture improvement and cultivation. All existing vegetation communities show varying levels of degradation associated with historical land uses, including clearing and encroachment by non-native species.

Ecological surveys identified four remnant Regional Ecosystems (REs) throughout the Referral Area, covering approximately 50.78 ha and generally consisting of Eucalypt and Acacia woodlands. Remnant vegetation throughout the area consists of REs 11.4.3, 11.3.25, 11.3.4 and 11.3.17. The remaining 1,637.45 ha throughout the surrounding areas has been historically cleared and consists of 80 ha of non-remnant regrowth vegetation and 1,557.45 ha of non-remnant vegetation. Currently, the Referral Act primarily consists of vegetation dominated by exotic pasture or cultivated species with some areas containing scattered paddock trees not characteristic of any particular RE. All vegetation communities show varying levels of degradation and weed invasion associated with historical land clearing. Refer to Figure 5 in the Terrestrial Ecology Report.

Field Surveys identified one EPBC Act listed Threatened Ecological Community (TEC) to be present within the Referral Area. Brigalow (*Acacia harpophylla* dominant and co-dominant) TEC was found to occur within the Referral Area as two small, isolated patches within MDL 301 covering approximately 2.27 ha, with 1.08 ha of the community occurring within the Disturbance Area. Popular Box Grassy Woodland on Alluvial Plains TEC was also identified throughout the Referral Area, however it did not meet the relevant TEC criteria. Refer to Figure 6 in the Terrestrial Ecology Report.

Refer to Attachment A Terrestrial Ecology Report, relevant pages 32 to 38 under this section.

## 3.3 Heritage

### 3.3.1 Describe any Commonwealth heritage places overseas or other places recognised as having heritage values that apply to the project area.

There are no Commonwealth heritage places overseas, or other places recognized as having heritage values that apply to the Project area.

### 3.3.2 Describe any Indigenous heritage values that apply to the project area.

The Cultural Heritage Risk Assessment (CHRA) for the site was conducted by Niche Environment and Heritage Pty Ltd (Niche) and included a desktop review to identify any known or potential Aboriginal cultural heritage constraints and a visual inspection of the Referral Area. The review of known constraints and the archaeological context, as well as a visual inspection demonstrated the Project activities may pose a risk to Aboriginal cultural Heritage.

Proposed works for the site has been assessed as Duty of Care Category 4 and Category 5:

- Category 4: The majority of the Referral Area has previously been subject to Significant Ground and Surface Disturbance and therefore meets the definition of Category 4.
- Category 5: The areas of remnant vegetation MDL 301 have not been subject to Significant Ground and/or Surface Disturbance and therefore the proposed activities will cause Additional Disturbance. Therefore, these areas meet the definition of Category 5.
- Category 5: Although some parts of the Referral Area has been subject to Significant Ground and Surface Disturbance through the clearing of remnant vegetation, the Project activities are inconsistent with previous disturbance.
- Category 5: The presences of drainage features and watercourses within the adjacent to the Referral Area further indicate the potential for Aboriginal cultural heritage within the Referral Area.

In order to mitigate any impacts to Indigenous heritage values as a result of the proposed action, MPP will:

- Revise the CHMP for the site in consultation with the Indigenous stakeholders to undertake appropriate pre-disturbance cultural heritage duty of care surveys.
- Establish an 'Unexpected Finds' procedure for unexpected cultural heritage finds and a 'Discovery of Human Remains' procedure in the unlikely event that suspected human remains are uncovered, and
- Provided all Project staff with a Cultural Heritage Induction prior to the commencement of Project works.

## 3.4 Hydrology

### 3.4.1 Describe the hydrology characteristics that apply to the project area and attach any hydrological investigations or surveys if applicable. \*

#### Surface Water

Surface water baseline assessments conducted by SLR (2020) outline that the Referral Area is located within the upper Condamine Catchment. The Condamine River Catchment is a part of the greater Balonne-Condamine Drainage Basin which is part of the greater Murray Darling Basin. The Condamine River flows north-west from Millmerran across the Darling Downs, joining with Dogwood Creek to become the Balonne River near Surat. The Balonne eventually flows into the Darling River and later the River Murray. The River Murray terminated in South Australia, flowing into the Southern Ocean via the Murray Mouth Estuary.

Land use within the region is largely agricultural, dominated by cattle and sheep grazing and dryland cropping. Areas of irrigated cropping are also present within the catchment, primarily used for cotton. Gas and Coal extractive industries are also present throughout the catchment. The catchment also includes large town centres, notably Toowoomba, Warwick and Dalby.

Nearby Bureau of Meteorology (BoM) stations indicate that the area receives a average annual rainfall of approximately 600-700mm. Analyses indicates that streamflow in the section of the Condamine River within the vicinity of the Referral Area is most likely ephemeral and influenced by quick runoff and rainfall into the stream.

Back Creek, a tributary of the Condamine River, traverses ML 50151 from South to North. Back Creek and it's upper branches flow though the site via a creek diversion constructed in the mine to both the north and south of the open cut pits and to the west of Millmerran Power Station. Back Creek generally flows north-east across the site. Once offsite, Back Creek flows through Millmerran and into the southern anabranch of the Condamine River, approximately 15km from site. Several other unnamed tributaries also flow through the Referral Area. These unnamed tributaries flow into Grasstree Creek and Back Creek, both of which are tributaries of the Condamine River.

Baseline desktop assessments outlining surface water resources related to the Referral Area has been completed, however detailed impact assessments are currently still in progress. A full surface water assessment will be developed for the completion of the EIS for the Project.

#### Groundwater

Attachment B outlines the hydrogeological characteristic of the Referral Area. The Commodore Coal Mine (CCM) lies in the southeast of the geological Surat Basin on the Kumbarilla Ridge, a somewhat poorly defined basement high that separates the Surat Basin in the west/northwest from the Clarence-Moreton Basin to the east/southeast (Figure 4-1, Attachment B). The Project's position overlying the Kumbarilla Ridge means that, hydrogeologically, the Project lies within the Great Artesian Basin (GAB), since the GAB's constituent Surat and Clarence-Moreton basins merge across the Kumbarilla Ridge to form a single connected hydrogeological system (OGIA, 2019).

Previous studies have identified the following three aquifers at CCM:

1. Alluvium associated with Back Creek (not considered part of the GAB).
2. Commodore Coal Seam of the Walloon Coal Measures (considered part of the GAB), predominantly located within the Commodore Syncline, and
3. Marburg Sandstone (part of the GAB).

It is considered that other geologic materials at the site from aquitards (Walloon Coal Measures interburden) or are dry (unconsolidated surficial deposits, shallow Walloon Coal Measures). East of the Referral Area, and particularly on the sloped of the Main Range (Great Dividing Range), the Main Range Volcanics is known to form a major ad highly productive aquifer. However, given its relatively sparse and isolated extent adjacent (west of) to the proposed action (Figure 4-2 of Attachment B), it is not considered that the unit forms a significant aquifer relevant to the action. This is supported by a lack of identified registered groundwater bored installed into this unit in proximity to the Referral Area.

Refer to Groundwater Baseline Report (Attachment B).

## 4. Impacts and mitigation

### 4.1 Impact details

#### Potential Matters of National Environmental Significance (MNES) relevant to your proposed action area.

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	No	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	No	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes

EPBC Act section	Controlling provision	Impacted	Reviewed
S24D	Water resource in relation to large coal mining development or coal seam gas	Yes	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth heritage places overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

#### 4.1.1 World Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

##### 4.1.1.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \*

No

##### 4.1.1.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \*

There is no World Heritage properties relevant to the Referral Area and there will be no impacts to World Heritage properties as a result of the Project.

#### 4.1.2 National Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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##### 4.1.2.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \*

No

##### 4.1.2.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \*

There are no National Heritage places relevant to the Referral Area and there will be no impacts to National Heritage places as a result of the Project.

### 4.1.3 Ramsar Wetland

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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#### 4.1.3.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \*

No

#### 4.1.3.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \*

There are no Ramsar Wetlands relevant to the Referral Area and there will be no impacts to Ramsar Wetlands as a result of the Project.

### 4.1.4 Threatened Species and Ecological Communities

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

#### Threatened species

Direct impact	Indirect impact	Species
Yes	Yes	Acacia harpophylla
Yes	Yes	Geophaps scripta scripta
No	No	Hirundapus caudacutus
Yes	Yes	Homopholis belsonii
No	No	Phascolarctos cinereus
No	No	Picris evae

#### Ecological communities

—

#### 4.1.4.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \*

Yes

**4.1.4.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. \*****Brigalow (*Acacia harpophylla*) dominant and co-dominant**

- The Brigalow TEC is listed as endangered under the EPBC Act. Ecological surveys identified 2.27 ha of this community throughout the Referral Area, including 1.08 ha of the TEC that will be directly cleared as a result of the proposed action within MDL 301 in association with patches of regrowth RE 11.4.3 (Figure 6, Attachment A).

**Belson's panic (*Homopholis belsonii*)**

- Ecological surveys identified 10.05 ha of habitat containing known populations of this species within the Referral Area, including 6.37 ha within the Disturbance Area that will be directly impacted as a result of the proposed action. Known habitat was recorded within the Gillespie's Dam Road easement in the southern portion of MDL 301 within both retained remnant RE 11.4.3 and cleared dominated by exotic grass species. The second area occurred directly adjacent to the Millmerran Inglewood Road within a patch of non-remnant regrowth analogous with RE 11.9.5 (Figure 7B, Attachment A).

**Hawkweed (*Picris evae*)**

- The species has been previously recorded in close proximity to the Referral Area in association with disturbed vegetation (i.e. roadside vegetation) within the Commodore River and floodplain (approx. 14 km north of the Referral Area) (DEC, 2021e) (Figure 7A, Attachment A). As the field survey was undertaken outside of the species optimal survey period (October to January), suitable habitat was mapped based on the species habitat preferences. Ecological surveys identified 18.83 ha of suitable habitat for this species throughout the Referral Area, including 0.69 ha that will be directly impacted as a result of the proposed action. Habitat was generally associated with Res 11.3.4 and 11.3.25, with habitat to be directly impacted being associated with the MDL 299 road diversion along the unnamed tributary of Back Creek (Figure 7C, Attachment A).

**Koala (*Phascolarctos cinereus*)**

- The Koala occurs in a range of temperate, sub-tropical forest, woodland and semi-arid communities dominated by Eucalyptus species (preference varying regionally). Diet is thought to be a major determinant of habitat selection, with the use of small remnants of original vegetation where suitable habitat is present (Department of Sustainability, Environment, Water, Population and Communities, 2012). While no individuals or evidence of koalas were observed during the field survey, Habitat type 1 and Habitat type 3a provides suitable habitat, with an abundance of preferred koala food trees (Eucalypt, Corymbia and Angophora spp.) and good connectivity to other areas of suitable habitat was identified (Figure 8, Attachment A). Ecological surveys identified 27.33 ha of suitable koala habitat to occur throughout the Referral Area, with 0.69 ha of this habitat being present within the Disturbance Area. Habitat to be directly impacted within the Disturbance Area is associated with the road diversion that is proposed to intersect the unnamed tributary of Back Creek within MDL 299 (Figure 9D, Attachment A). While koala food trees are present within Habitat 3a, due to the isolated and fragmented nature these areas were considered unlikely to be utilized by the species.

**Southern squatter pigeon (*Geophaps scripta scripta*)**

- While the species was not observed during the field survey, the species has been previously recorded within ML 50151 as part of the initial field surveys for the CCM (SKM, 1999). The species has also been previously recorded within the surrounding area (Figure 9A, Attachment A). Habitat for the species comprises open forest to sparse, open woodlands containing Eucalyptus, Corymbia, Acacia or Callitris species in the ecologically dominant layer on well-draining gravelly, sandy or loamy soils, generally within 3km of a water source (DAWE, 2022). Ecological surveys identified 6.31 ha of breeding habitat and 35.64 ha of foraging habitat throughout the Referral Area. This includes 4.63 ha of breeding habitat and 4.38 ha of foraging habitat that will be directly impacted as a result of the proposed action (Figure 9B, Attachment A).

**White-throated needletail (*Hirundapus caudacutus*)**

- White-throated needletails occur over most types of habitat. When flying above farmland, they are more often recorded above partly cleared pasture, plantations or remnant vegetation at the edge of paddocks (Threatened Species Scientific Committee, 2019). The Referral Area provides suitable foraging habitat for the species aerially above the entirety of the area. However, as the species does not breed within Australia, no suitable breeding habitat occurs.

**4.1.4.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? \***

Yes

**4.1.4.5 Describe why you consider this to be a Significant Impact. \***

Yes:

- Brigalow (*Acacia Harpophylla*) dominant and co-dominant
- Belson's panic (*Homopholis belsonii*)
- Southern squatter pigeon (*Geophaps scripta scripta*)



No:

- Hawkweed (*Picris evae*)
- Koala (*Phascolarctos cinereus*)
- White-throated needletail (*Hirundapus caudacutus*)

Impacts to Brigalow TEC, Belson's panic and Southern squatter pigeon are considered to be significant. Impact to Hawkweed, Koala and White-throated needletail are considered to be insignificant (Attachment A).

#### Significant Impacts

##### **Brigalow (*Acacia Harpophylla*) dominant and co-dominant**

- The Project will result in the direct clearing of 1.08 ha of Brigalow TEC, adversely affecting habitat critical to the survival of an ecological community through the modification of abiotic factors and causing a substantial change in the species composition of an occurrence of an ecological community via vegetation clearing.

##### **Belson's panic (*Homopholic belsonii*)**

- The Project will result in the direct clearing of 6.37 ha of habitat containing known populations of the species. This is likely to result in a long-term decrease in the size of the local populations and a reduction in the area of occupancy for the local population.

##### **Southern squatter pigeon (*Geophaps scripta scripta*)**

- The Project will result in the direct clearing of 4.63 ha of breeding habitat and 4.38 ha of foraging habitat for the species. The Project will impact habitat critical to the survival of the species and reduce the area of occupancy for an important population.

#### Insignificant Impacts

##### **Hawkweed (*Picris evae*)**

- The Project will impact 0.69 ha of suitable habitat for the species. However, given the extent of habitat disturbed and the unlikelihood of impediments to pollination or seed dispersal of the species, the Project is unlikely to significantly impact habitat critical to the survival of the species or an important population (if present). Furthermore, the Project is also considered unlikely to substantially interfere with the recovery of species or increase the potential threats to any populations present (if any).

##### **Koala (*Phascolarctos cinereus*)**

- The Project will impact 0.69 ha of suitable habitat for the species (associated with the road diversion). The proposed clearing represents a small proportion of suitable habitat available within the surrounding areas and will not create an impenetrable barrier for the species, allowing the movement of individuals along the riparian corridor. No recent scats or scratches were observed during the field survey and the species was not identified during a nocturnal survey, indicating a low species utilization of the Referral Area. Furthermore, the Project is unlikely to restrict movement of the species across the greater landscape or result in an increase of potential threats to the species. Specially, the Project is considered unlikely to result in a significant impact to the species due to the:
  - Retention of koala movement corridors associated with riparian vegetation.
  - The likely low density or abundance of koala within the region resulting from historical and ongoing land use practices.
  - Implementation of fauna-friendly mitigation measures to minimise any potential indirect impacts resulting from the Project on the species, and
  - The action being unlikely to substantially interfere with the recovery of the species.

##### **White-throated needletail (*Hirundapus caudacutus*)**

- The species is a wide-ranging nomadic species that is almost exclusively aerial in Australia and breeds in the northern hemisphere (DAWE, 2021b). The species is known to occur over a wide range of habitats, including cleared habitats (DAWE, 2021b). As such, the clearing of vegetation associated with the Project is considered unlikely to lead to a long-term decrease in the species population, area of occupancy, quality of habitat or result in an invasive species or disease that may cause the species to decline. Furthermore, the Project is unlikely to interfere substantially with the recovery of the species.

Refer Attachment A Terrestrial Ecology Report, relevant pages 87 to 88.

#### **4.1.4.7 Do you think your proposed action is a controlled action? \***

Yes

#### **4.1.4.8 Please elaborate why you think your proposed action is a controlled action. \***

The proposed action is considered to be a controlled action, as there are likely to be significant impacts to Brigalow TEC and habitat for Belson's panic and the Southern squatter pigeon throughout the Disturbance Area. Although cumulative impacts are considered to be negligible (see Section 6.3.2, Attachment A), the proponent is adopting the precautionary principle and assumed the proposed action to be a controlled action.

Refer to Attachment A Terrestrial Ecology Report, relevant pages 80 to 86, under this section.

**4.1.4.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. \***

While the proposed action would result in unavoidable impacts on native vegetation, a range of vegetation clearing measures would need to be implemented over both the construction and operational phases of the Project. These include the following:

- Vegetation clearing extents will be kept to the minimum area necessary for construction. Areas that must not be cleared or damaged would also be clearly identified on construction plans.
- Placement of temporary infrastructure is to be located outside of remnant vegetation, with areas previously cleared/degraded (non-remnant) to be prioritised.
- Boundaries of areas to be cleared, and those not to be cleared are to be clearly defined during clearing activities. Where necessary, signage, flagging and/or barricade fencing may be used to demarcate areas not to be cleared and clearly communicated to all necessary construction personnel.
- Implementation of weed hygiene protocols (e.g. wash-down, weed hygiene certification) for all vehicles, equipment and materials brought onto site.
- Development of a Rehabilitation Management Plan. All areas containing temporary infrastructure and cleared areas which are no longer required are to be rehabilitated as soon as practicable, and
- Topsoil within areas for temporary infrastructure should be stockpiled for redistribution during rehabilitation activities.

In order to mitigate unavoidable impacts on fauna habitat values associated with the proposed action, a range of vegetation clearing measures will be implemented over the course of the Project. Measures associated with the spread of environmental weeds, noise light and dust are discussed in sections 6.2.4 and 6.2.6 of Attachment A respectively. Mitigation measures include the following:

- Pre-clearance fauna surveys are to be undertaken by suitably experienced and qualified persons to identify individual fauna at direct risk from clearing activities.
- A suitably experienced and qualified fauna spotter/catcher would be present during the clearing of any structures that may serve as habitat or refugia for animals, particularly remnant and regrowth habitat areas.
- Prior to removal, all hollow-bearing trees approved for removal are to be thoroughly checked for fauna presence prior to felling. If presence is identified, it is recommended that the tree to be left overnight to allow for self-dispersal.
- Management of fauna identified during clearing would include relocating individuals to adjacent habitat or treating injuries.
- In the event a koala is identified within areas to be cleared, the individual is to be left to vacate the area on its own accord.
- Select habitat features (e.g. hollow bearing trees, woody debris, logs and rocks) should be salvaged for re-use in rehabilitation areas or relocated into adjacent areas of habitat to be retained.
- Vegetation clearing should be carried out sequentially over the life of the Project to allow fauna species the opportunity to disperse away from clearing areas.
- Directional clearing towards retained vegetation would be undertaken where practical to enable the movement of fauna into retained vegetation.
- During construction works, work areas and excavations (trenches) are to be checked for fauna that may have become trapped.
- If trenches remain open after daily site works have been completed, fauna ramps would be put in place.
- Vehicles are to remain on designated access tracks and adhere to site rules relating to speed limited. Speed limits are to be clearly signposted to minimise potential fauna strike.
- Removal of roadkill should be undertaken to minimise the risk of attracting other fauna to the road corridor.
- Contingencies and procedures for the treatment of injured fauna, and
- Where installation of fencing is required, considerations to facilitation movement of fauna around and/or through the fencing, except where fenced areas seek to protect fauna from threats such as active mine areas. Barbed wire should not be used on the top strand of wire fences unless necessary for security.

Refer to Attachment A Terrestrial Ecology Report, relevant page 72 to 75, under this section.

**4.1.4.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. \***

MPP is in the process of investigating suitable offsets for the Project.

#### 4.1.5 Migratory Species

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

##### 4.1.5.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \*

No

##### 4.1.5.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \*

Desktop assessments identified 13 migratory species that were predicted to occur within 20 km of the Referral Area (PMST), however none were recorded during the field survey. 'Important Habitat' for migratory species is a key factor for determining whether an action will result in a significant impact. The Referral Area is located within a largely fragmented landscape containing disturbed vegetation with limited habitat values of critical importance to migratory species. As such, the Referral Area is not considered to comprise important habitat, as defined above, for any migratory species listed under the EPBC Act.

Refer to Attachment A Terrestrial Ecology Report page 60.

#### 4.1.6 Nuclear

##### 4.1.6.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? \*

No

##### 4.1.6.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \*

The action is not a nuclear action.

#### 4.1.7 Commonwealth Marine Area

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

**4.1.7.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \***

No

**4.1.7.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \***

The Commonwealth Marine area is not relevant to the Referral Area and there will be no impacts to the Commonwealth Marine Area as a result of the Project.

**4.1.8 Great Barrier Reef**

**4.1.8.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? \***

No

**4.1.8.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \***

The Great Barrier Reef is not relevant to the Referral Area and there will be no impacts to the Great Barrier Reef as a result of the Project.

**4.1.9 Water resource in relation to large coal mining development or coal seam gas**

**4.1.9.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? \***

Yes

**4.1.9.2 Briefly describe why your action has a direct and/or indirect impact on this protected matter. \***

**Groundwater Dependant Ecosystems - GDEs**

Baseline assessments outlining the current GDEs throughout the Referral Area have been completed, however, a detailed assessments are currently in progress and impacts to GDEs will be completed during EIS process. The Terrestrial Ecology Report (Attachment A) has identified areas of high potential GDEs within the remnant vegetation state mapped as RE 11.3.2/11.3.25, which have subsequently been ground truthed as containing REs 11.3.25 and 11.3.4. Low potential terrestrial GDEs are mapped as being present in MDL 299 and MDL 301 in association with state mapped remnant vegetation on alluvials (land zone 3) and adjacent plains (land zone 4 and 5) (Figure 4,

Attachment A). Potential GDEs within or directly adjacent to the Referral Area are likely to be confirmed to communities on land zone 3, primarily 11.3.25 and 11.3.4, associated with unnamed tributaries of Back Creek and floodplains. The fringing sclerophyll community that comprises these REs contains River red gum, a species known to have an obligate dependence on groundwater.

The Groundwater Baseline Report (Attachment B), however, outlines that the water table across the Referral Area and surrounds is generally deeper than 10 meters below ground level (mbgl) and as such does not offer accessible resources for vegetation communities to rely on. There has been no identified environmental use of groundwater within the vicinity of the Referral Area in any previous study. Given the relatively deep groundwater however (>10 mbgl), it is considered unlikely that there are true GDEs in these areas that access groundwater (Attachment B).

#### **Groundwater and Surface Water**

Baseline assessments outlining the current hydrogeological environment surrounding the Referral Area has been completed, however detailed impact assessments are currently in progress for the completion of the Eis for the Project. A search of the current Queensland Government registered groundwater bore database identified 83 bores within 5km of the Referral Area. Potentially relevant environmental values for the Project include farm supply/use, stock watering and industrial use. Previous studies have identified three aquifers to be relevant at Commodore Coal Mine, included the alluvium associated with Back Creek, the Commodore Coal Seam of the Walloon Coal Measures and the Marburg Sandstone (part of the GAB). Other geological materials at the site form aquitards or are dry. The Main Range Volcanics to the east of the Referral Area is known to form a major and highly productive aquifer. However, given it's relatively sparse and isolated extent adjacent (west of) to the proposed action (Figure 4-2, Attachment B), it is not considered that the unit forms a significant aquifer relevant to the action.

Based on preliminary results, it is currently anticipated that impacts to groundwater and surface water will be similar to those outlined in the original Impact Assessment Study (IAS) for the Project, completed in 1998 (Attachment C). The IAS outlined that there will be no extraction of water from Back Creek, and there will be no planned discharges of water off the site into Back Creek except in accordance with the existing Environmental Authority. The mine plan was designed to maintain production levels with minimum disturbance to Back Creek for a period of atleast 20 years, after which Back Creek is diverted within rehabilitated land as the North Pit is backfilled and rehabilitated. The diversion will be completed in 2022. Only the bores which are in the Commodore Coal Seam as part of the Walloon Measures would be affected by the mine. The Commodore Coal Seam aquifer is not hydraulically connected to surrounding aquifer systems, for example the Marburg Sandstone. The document also outlined that there will be minimal impact from the mining operation on groundwater users outside the ownership boundary. A final void will remain after mining and there will be no permanent water held in the void, however salinity is not predicted to concentrate, and water will be available for stock on a irregular basis.

#### **4.1.9.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? \***

Yes

#### **4.1.9.5 Describe why you consider this to be a Significant Impact. \***

Impact assessment for the current Project as a part of the EIS process have not yet been completed. Consequently, the proponent has chosen to adopt the precautionary principle and will assume that the impacts to water resources as a result of the Project will be significant.

#### **4.1.9.7 Do you think your proposed action is a controlled action? \***

Yes

#### **4.1.9.8 Please elaborate why you think your proposed action is a controlled action. \***

The proponent has chosen to adopt the precautionary principle as an assessment approach to water resources in the absence of completed impact assessments resulting in the presumption of a significant impact outcome. As a result, the proponent considers the action to be a controlled action.

**4.1.9.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. \***

Mitigation measures to minimise potential impacts to hydrology and groundwater associated with the Project include:

- Erosion and sediment control monitoring in accordance with the CCM Site Water Management Plan (4975-SE-PLA1007) to reduce the amount of sediment laden run-off entering downstream waterways. The following general principles should apply to the erosion and sediment controls:
  - minimise the surface disturbance areas
  - where possible, apply local temporary erosion control measures
  - intercept run-off from undisturbed areas and divert around surface disturbance areas, through the use of up-catchment diversions, and
  - where temporary measures are likely to be ineffective, direct surface water run-off from surface disturbance areas to sediment dams prior to release from the Referral Area.
- Active haul roads are to be regularly watered (or applied with dust suppressants) to minimise dust generation potential (as detailed within the Dust Management Plan for Commodore Mine (8523-SE-PLA1014).
- Bunding and appropriate storage of fuels and other hazardous and flammable materials will be undertaken in accordance with AS1940:2004, and where practical, will be located away from any waterbodies.
- Oil spill recovery equipment will be available when working adjacent to drainage channels with the ability to discharge offsite. Spill kits will be located with construction crews conducting activities with the potential for significant spills.
- As soon as practicable, disturbed areas will be rehabilitated to reduce the amount of exposed soils.
- Implement annual monitoring of groundwater quality and potential drawdown to identify trends and changes over time.

**4.1.9.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. \***

Not applicable. MPP has not proposed any offsets relevant to a water resource.

**4.1.10 Commonwealth Land**

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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**4.1.10.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \***

No

**4.1.10.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \***

There is no Commonwealth Land relevant to the Referral Area and there will be no impacts to Commonwealth Land as a result of the Project.

#### 4.1.11 Commonwealth heritage places overseas

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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##### 4.1.11.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \*

No

##### 4.1.11.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. \*

There is no Commonwealth heritage places overseas relevant to the Referral Area and there will be no impacts to Commonwealth heritage places overseas as a result of the Project.

#### 4.1.12 Commonwealth or Commonwealth Agency

##### 4.1.12.1 Is the proposed action to be taken by the Commonwealth or a Commonwealth Agency? \*

No

## 4.2 Impact summary

### Conclusion on the likelihood of significant impacts

You have indicated that the proposed action will likely have a significant impact on the following Matters of National Environmental Significance:

- Threatened Species and Ecological Communities (S18)
- Water resource in relation to large coal mining development or coal seam gas (S24D)

### Conclusion on the likelihood of unlikely significant impacts

You have indicated that the proposed action will unlikely have a significant impact on the following Matters of National Environmental Significance:

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Commonwealth Land (S26)
- Commonwealth heritage places overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

## 4.3 Alternatives

### 4.3.1 Do you have any possible alternatives for your proposed action to be considered as part of your referral? \*

No

### 4.3.8 Describe why alternatives for your proposed action were not possible. \*

The Referral Area is constrained by resource, geographic, environmental, existing infrastructure and feasibility considerations. As such, the only alternative is to not undertake the action. The direct consequences of not proceeding with the proposed action are the loss of cheap baseload electricity post 2036, and loss of sustained positive economic opportunities for the locality and the region. The potential positive impact of not proceeding with the action is avoiding the potential environmental impacts. In this case, impacts on land, water and air (and associated physical, biological and social impacts) potentially arising from the action, would not occur. The proposed action is to supply fuel source for baseload power station into the National Electricity Grid, providing an essential service.

## 5. Lodgement

### 5.1 Attachments

#### 1.2.1 Overview of the proposed action

#1. Project Overview	Document	Project Overview
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#### 2.2.5 Tenure of the action area relevant to the project area

#1. Land Ownership	Document	Land Ownership
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#### 3.2.1 Flora and fauna within the affected area

#1.
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Attachment A Terrestrial Ecology Report	Document	Outlines the outcome of the ecological assessment on site and potential impacts to MNES
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## 3.2.2 Vegetation within the project area

#1. Attachment A Terrestrial Ecology Report	Document	Outlines the outcome of the ecological assessment on site and potential impacts to MNES
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## 3.4.1 Hydrology characteristics that apply to the project area

#1. Attachment B Groundwater Baseline Report	Document	Outlines the existing hydrogeological conditions of the Referral Area
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## 4.1.4.2 (Threatened Species and Ecological Communities) Why your action has a direct and/or indirect impact on the identified protected matters

#1. Attachment A Terrestrial Ecology Report	Document	Outlines the outcome of the ecological assessment on site and potential impacts to MNES
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## 4.1.4.5 (Threatened Species and Ecological Communities) Why you consider the direct and/or indirect impact to be a Significant Impact

#1. Attachment A Terrestrial Ecology Report	Document	Outlines the outcome of the ecological assessment on site and potential impacts to MNES
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## 4.1.4.8 (Threatened Species and Ecological Communities) Why you think your proposed action is a controlled action

#1. Attachment A Terrestrial Ecology Report	Document	Outlines the outcome of the ecological assessment on site and potential impacts to MNES
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## 4.1.4.10 (Threatened Species and Ecological Communities) Avoidance or mitigation measures proposed for this action

#1. Attachment A Terrestrial Ecology Report	Document	Outlines the outcome of the ecological assessment on site and potential impacts to MNES
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## 4.1.5.3 (Migratory Species) Why your action is unlikely to have a direct and/or indirect impact

#1. Attachment A Terrestrial Ecology Report	Document	Outlines the outcome of the ecological assessment on site and potential impacts to MNES
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## 4.1.9.2 (Water resource in relation to large coal mining development or coal seam gas) Why your action has a direct and/or indirect impact

#1. Attachment C Impact Assessment Study 1998	Document	Draft Impact Assessment Study outlining environmental impact of the MPP in 1998
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## 5.2 Declarations

### Completed Referring party's declaration

The Referring party is the person preparing the information in this referral.

Organisation name	MILLMERRAN POWER MANAGEMENT PTY LTD
Organisation address	Level 31, 345 Queen Street Brisbane QLD 4000
Representative's name	Shayne King
Representative's job title	Commercial Manager
Phone	0408188051
Email	sking@intergen.com
Address	Level 31, 345 Queen Street, Brisbane QLD 4000

- Check this box to indicate you have read the referral form. \*
- I would like to receive notifications and track the referral progress through the EPBC portal. \*
- By checking this box, I, **Shayne King of MILLMERRAN POWER MANAGEMENT PTY LTD**, 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. \*
- I would like to receive notifications and track the referral progress through the EPBC portal. \*

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### Completed Person proposing to take the action's declaration

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

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Same as Referring party information.

- Check this box to indicate you have read the referral form. \*
- I would like to receive notifications and track the referral progress through the EPBC portal. \*
- I, **Shayne King of MILLMERRAN POWER MANAGEMENT PTY LTD**, 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. \*
- I would like to receive notifications and track the referral progress through the EPBC portal. \*

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### Completed Proposed designated proponent's declaration

The Proposed designated proponent is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

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Same as Person proposing to take the action information.

- Check this box to indicate you have read the referral form. \*
- I would like to receive notifications and track the referral progress through the EPBC portal. \*
- I, **Shayne King of MILLMERRAN POWER MANAGEMENT PTY LTD**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. \*

I would like to receive notifications and track the referral progress through the EPBC portal. \*