Title of Proposal - McPhillamys Gold Project, about 8 kilometres northeast of Blayney, NSW

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.

LFB Resources NL - a 100% owned subsidiary of Regis Resources Ltd - (the Applicant) is seeking development consent for the construction and operation of the McPhillamys Gold Project (the project), a greenfield open cut gold mine and water supply pipeline in the Central West of New South Wales (NSW). The project application area is illustrated at a regional scale in Figure 1.

The mine development project boundary (herein referred to as the project area) is illustrated in Figure 2 and covers the Mining Lease (ML) application area for the project as well as the parts of the project that do not require a ML. This figure also illustrates evolution of the mine development, and alternative scenarios investigated (see sections 4.1 and 8).

Water will be supplied to the mine via a pipeline (the pipeline development) approximately 90 km in length, transferring surplus water to the mine from Centennial's Angus Place Colliery (Angus Place), Springvale Coal Services Operations (SCSO) and Energy Australia's (EA) Mt Piper Power Station (MPPS) near Lithgow. The supply of water from Angus Place, SCSO and MPPS will enable a beneficial use of otherwise surplus water and provide a reliable water source for the project.

The key components of the project are as follows:

• Development and operation of a single circular open cut mine with a diameter of approximately 1,050 metres (m) and a final depth of approximately 460 m. The mine will be developed by conventional open cut mining methods encompassing drill, blast, load and haul operations. Up to 8.5 million tonnes per annum (Mtpa) of ore will be extracted during operations.
• Construction and operation of a conventional carbon-in-leach processing facility with a rate of processing rate up to 7 Mtpa to produce up to 200,000 ounces per annum of product gold, comprising a run-of-mine (ROM) pad and crushing, grinding, gravity, leaching, gold recovery, tailings thickening, cyanide destruction and tailings management circuits.
• Placement of waste rock into a waste rock emplacement which will include encapsulation of material with the potential to produce a low pH leachate. A portion of the waste rock emplacement will be constructed and rehabilitated early in the project to act as an amenity bund.
• Construction and use of an engineered tailings storage facility to store tailings material.
• Construction and operation of associated mine infrastructure including:
o administration buildings and bathhouse;

o workshop and stores facilities, including associated plant parking, laydown and hardstand areas, vehicle washdown facilities, and fuel and lubricant storage;
o internal road network;
o explosives magazine and ammonium nitrate emulsion storage facilities;
o topsoil, subsoil and capping stockpiles;
o ancillary facilities, including fences, access roads, car parking areas and communications infrastructure; and
o on-site laboratory.
• Establishment and use of a site access road and intersection with the Mid Western Highway.
• Construction and operation of water management infrastructure, including raw water storage, clean water and process water diversions and storages, and sediment control infrastructure.
• Peak workforces of approximately 530 full-time equivalent employees during construction and approximately 255 full-time employees during operations.
• Construction phase of approximately two years, followed by 10 years of mining, and a closure and rehabilitation phase of two to three years, leading to a total project life of approximately 15 years.
• Construction and operation of a water supply pipeline approximately 90 km in length from Centennial's Angus Place Colliery (Angus Place), Springvale Coal Services Operations (SCSO) and Energy Australia's (EA) Mt Piper Power Station (MPPS) near Lithgow to the mine project area.
• The pipeline development will include approximately six pumping stations, five storage tanks, isolation valves, pressure reducing and scour valves, power supply and controls and a communication system. Approximately 13 ML/day will be transferred for mining and processing operations during the operational phase of the mine development.
• Environmental management and monitoring equipment. Progressive rehabilitation throughout the mine life. At the end of mining, mine infrastructure will be decommissioned, and disturbed areas will be rehabilitated to integrate with natural landforms as far as practicable. The final landform, apart from the final void and tailings dam, will support land uses similar to current land uses.

This referral relates only to the mine development component of the project. Supplementary information appended to this referral (Attachment 2) demonstrates that the pipeline development will not have a significant impact on matters of national significance and therefore does not represent a controlled action.

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
Mine Development Project Area	1	-33.4791842971	149.29850682578
Mine Development Project Area	2	-33.460497240012	149.30314168296
Mine Development Project Area	3	-33.450686712501	149.30520161948

Area	Point	Latitude	Longitude
Mine Development Project Area	4	-33.451904137549	149.31163892112
Mine Development Project Area	5	-33.448251811135	149.31292638144
Mine Development Project Area	6	-33.448538273667	149.31490048728
Mine Development Project Area	7	-33.445888459145	149.31532964072
Mine Development Project Area	8	-33.447320801371	149.32502850852
Mine Development Project Area	9	-33.444599330918	149.32571515403
Mine Development Project Area	10	-33.446676250296	149.34167966208
Mine Development Project Area	11	-33.453121545507	149.34056386313
Mine Development Project Area	12	-33.453264768849	149.34133633933
Mine Development Project Area	13	-33.459995999092	149.34013470969
Mine Development Project Area	14	-33.46028242283	149.3422804769
Mine Development Project Area	15	-33.461929340959	149.34459790549
Mine Development Project Area	16	-33.470449852421	149.34279546103
Mine Development Project Area	17	-33.471523807025	149.34854611716
Mine Development Project Area	18	-33.479542247362	149.34708699546
Mine Development Project Area	19	-33.479828606507	149.34871777854
Mine Development Project Area	20	-33.480830856059	149.34700116477
Mine Development Project Area	21	-33.482047857783	149.34777364097
Mine Development Project Area	22	-33.48362277581	149.35026273093
Mine Development Project Area	23	-33.48634302132	149.34949025474
Mine Development Project Area	24	-33.487130444864	149.35455426536
Mine Development Project Area	25	-33.488920017204	149.35412511191
Mine Development Project Area	26	-33.488562105694	149.35129269919
Mine Development Project Area	27	-33.49035164845	149.35112103782

Area	Point	Latitude	Longitude
Mine Development Project Area	28	-33.491210615838	149.35781583152
Mine Development Project Area	29	-33.50316369421	149.35558423362
Mine Development Project Area	30	-33.499728247877	149.34923276267
Mine Development Project Area	31	-33.498869364989	149.34597119651
Mine Development Project Area	32	-33.499799821066	149.34176549277
Mine Development Project Area	33	-33.499012512729	149.33704480491
Mine Development Project Area	34	-33.49772417455	149.32983502707
Mine Development Project Area	35	-33.497151573649	149.32571515403
Mine Development Project Area	36	-33.497223148969	149.31876286826
Mine Development Project Area	37	-33.497509449656	149.31447133384
Mine Development Project Area	38	-33.496149512961	149.31464299521
Mine Development Project Area	39	-33.492785367251	149.28477391562
Mine Development Project Area	40	-33.487058861201	149.2894087728
Mine Development Project Area	41	-33.485913514551	149.29172620139
Mine Development Project Area	42	-33.478683164249	149.29215535483
Mine Development Project Area	43	-33.4791842971	149.29842099509
Mine Development Project Area	44	-33.4791842971	149.29850682578

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 mine development (Figure 2) is approximately 8 km northeast of Blayney within the Blayney and Cabonne local government areas (LGAs), in the upper reaches of the Belubula River catchment, within the greater Lachlan River catchment.

The mine development project area is approximately 2,564.7 ha, with a disturbance footprint of approximately 1,020 ha (calculated as a 10 m buffer around all infrastructure elements). The original mine development footprint was 1,138.6 ha (calculated as for the disturbance footprint), and therefore the avoidance footprint is 118.8 ha.

Figure 3 shows the previous and current mine development and demonstrate how the design has evolved to avoid and or minimise impacts on threatened biodiversity. Additional information on the project evolution is presented in Section 4.1, with particular emphasis on the avoidance and minimisation of biodiversity impacts.

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

1,020

1.7 Is the proposed action a street address or lot?

Street Address

294 Dungeon Road
Kings Plains NSW 2799
Australia

1.8 Primary Jurisdiction.

New South Wales

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 01/2020

End date 12/2035

1.12 Provide details of the context, planning framework and State and/or Local

government requirements.

In order to construct and operate the project, the Applicant will require the following approvals, licences and consents:

The project is State significant development (SSD) pursuant to Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011* (State and Regional Development SEPP). Accordingly, approval of the project is required under Part 4, Division 4.1 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

In addition to development consent, the project will require a number of other authorisations. Under Section 4.42 of the EP&A Act, the following authorisations cannot be refused and are to be substantially consistent with a development consent for SSD:

a). an aquaculture permit under section 144 of the Fisheries Management Act 1994;b). an approval under section 15 of the Mine Subsidence Compensation Act 1961;c). a mining lease under the Mining Act 1992; Note. Under section 380A of the Mining Act 1992, a mining lease can be refused on the ground that the applicant is not a fit and proper person, despite this section. d). a production lease under the Petroleum (Onshore) Act 1991; Note. Under section 24A of the Petroleum (Onshore) Act 1991, a production lease can be refused on the ground that the applicant is not a fit and proper person, despite this section. e). an environment protection licence under Chapter 3 of the Protection of the Environment Operations Act 1997 (for any of the purposes referred to in section 43 of that Act);f). a consent under section 138 of the Roads Act 1993; andg). a licence under the Pipelines Act 1967.

Of the above, only a mining lease (ML), Environment Protection Licence (EPL) and Section 138 approval under the *Roads Act 1993* (Roads Act) are relevant to the project. In addition, water access licences will also be required under the *Water Management Act 2000* (WM Act).

The mine development component of the project was determined by the NSW Department of Planning and Environment (DPE) on 16 January 2018 to be a pending or interim planning application under clause 27 of Part 7 of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017* provided the project application is made within 18 months of DPE’s determination.

This referral is being made to the Commonwealth Department of the Environment and Energy (DoEE), as the Applicant anticipates that the project will be declared a controlled action requiring assessment and approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The project will be assessed under the bilateral agreement between the Commonwealth and NSW governments in accordance with Part 5 of the EPBC Act.

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

Stakeholder engagement and consultation forms a key information input in the preparation of the environmental impact statement and respective technical assessments.

The Applicant has undertaken a range of communications and engagement activities to ensure those directly impacted in the community are kept informed of project progress. Some residents are opposed to the project, others are supportive and some neutral.

The Applicant has actively consulted with local landowners, residents and community groups. Since obtaining licences to conduct exploration for the project site, there have been community consultation meetings, community drop in sessions, face to face meetings, telephone conversations, community information sheets and emails. These have allowed the Applicant to identify and engage with local landowners and other potential stakeholders. More recently the Applicant has established a Community Consultative Committee (CCC).

The Applicant’s engagement with the community is guided by a community and stakeholder engagement plan. The aim of the Applicant's stakeholder consultation activities for the McPhillamys Gold Project has been to facilitate structured stakeholder input to inform relevant environmental assessments and demonstrate open, transparent engagement through EIS development and publication. To achieve this aim, the Applicant has established several objectives in the community and stakeholder engagement plan:

• Providing proactive information to the community and other stakeholders;• Effectively managing enquiries; and• Monitoring and managing issues if they emerge.

Consultation with the relevant registered Aboriginal stakeholders and other relevant members of the Aboriginal community was undertaken initially by RW Corkery & Co Pty Limited and then by Navin Officer Heritage Consultants Pty Limited (NOHC) and is continuing with Landskape. Initial consultation and notification has been completed in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010). Orange Local Aboriginal Land Council (LALC) is the only Registered Aboriginal Party (RAP).

Consultation with Orange LALC has been carried out in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010) and to date has included personally addressed letters, providing information on the mine development and requests for input, as well as email correspondence, phone calls and on-site meetings and meetings to discuss the heritage values of the project area and the proposed management measures.

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.

An environmental impact statement is currently being prepared to accompany the development application for the project (SSD 18_9505). It is noted that DPE's environmental assessment requirements (EARs) issued on the 24 July 2018 and revised on 19 December 2018, require the mine development component of the project be assessed in accordance with the *Framework for Biodiversity Assessment;* and includes a strategy to offset any residual impacts in accordance with the *NSW Biodiversity Offsets Policy for Major Project.*

As noted in Section 1.12 above, the mine development has been declared a pending or interim planning application, impacts on biodiversity will be assessed in accordance with the requirements of the *Framework for Biodiversity Assessment (FBA)* (OEH 2014) under the *Threatened Species Conservation Act 1995*.

At the time of this determination by the DPE the biodiversity assessment of the pipeline development had not substantially commenced, and therefore the EARs require this component of the project be assessed in a Biodiversity Development Assessment Report (BDAR) in accordance with the Biodiversity Assessment Method (BAM).

Biodiversity field surveys have been undertaken for project, providing a detailed understanding of biodiversity values and potential impacts of the project. The collection of biodiversity field data has informed the iterative project design which has sought to avoid and minimise impacts on threatened biodiversity.

The mine development will impact 15.6 ha of White Box Yellow Box Blakely's Red Gum Woodland and Derived Native Grassland (Box Gum Woodland), a critically endangered ecological community under the EPBC Act. A pre-referral meeting was held on 5 December 2018 to seek early input from the Department of Environment and Energy (DoEE) on the project's expected biodiversity impacts. At the time of the meeting, the impacts on EPBC Act listed Box Gum Woodland was estimated at 33.5 ha. Additional mapping has been completed with careful consideration of the key condition thresholds in *EPBC Act Policy Statement 3.5 White Box Yellow Box Blakely's Red Gum Woodland and Derived Native Grassland* (DEH 2006). The revised mapping (see Figure 4) shows that the mine development will impact 15.6 ha of Box Gum Woodland (note this includes a reduction attributable to avoidance of areas of this community through redesign – see Section 4.1).

The mine development is likely to result in a significant impact on Box Gum Woodland, requiring assessment and approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The pipeline development will not result in significant impacts on matters of

national environmental significance (see Attachment 2), and therefore does not form part of the controlled action. Documentation has been provided in Attachments 1 and 2 in support of the above statement.

An application will be made to DoEE to assess the mine development under the bilateral agreement between the Commonwealth and NSW governments in accordance with Part 5 of the EPBC Act. The pipeline development will not form part of the application

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?

No

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
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	15.6 ha

Species	Impact
Koala	119.8 ha (for breakdown see Attachment 1)

2.4.2 Do you consider this impact to be significant?

Yes

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?

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?

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 any part of the environment in the Commonwealth marine area?

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.

For the proposed mine site, a total of 104 flora species were recorded in baseline surveys within the Biodiversity Study Area, comprising 62 native species and 42 exotic species (EnviroKey, 2018). Despite extensive searches within the project area at appropriate times of year for detectability, no threatened flora species have been identified, including additional surveys undertaken by EMM Consulting in early 2019. Fauna surveys within and surrounding the project area since 2013 detected 159 species of fauna, including 113 species of bird (including five introduced species); 11 species of frog; 10 species of reptile; and 25 species of mammal (including five introduced species) (Envirokey, 2018).

A single Koala (listed under the EPBC Act) was recorded by EMM Consulting in February 2019 in the east of the project area (see Figures 4 and 6). No scats were recorded throughout the project area (in 24 SAT plots undertaken) and the importance of the habitat in the study area is unclear at this stage. As such, in this referral a conservative approach has been undertaken, in including any eucalypt woodland communities within the project area within potential habitat disturbance calculations. A more detailed assessment of the nature of Koala habitat (including assessment of critical habitat following Table 4 of the EPBC Act referral guidelines for the vulnerable koala) will be carried out in the EIS currently being prepared.

Species listed under the BC Act recorded in mine development project boundary (the project area), including additional surveys undertaken by EMM Consulting in early 2019, comprised Flame Robin (*Petroica phoenicea*), Scarlet Robin (*Petroica boodang*), Diamond Firetail (*Stagonopleura guttata*), Little Eagle (*Hieraaetus morphnoides*), Black-chinned Honeyeater (*Melithreptus gularis*), Varied Sittella (*Daphoenositta chrysoptera*), Dusky Woodswallow (*Artamus cyanopterus*), Squirrel Glider (*Petaurus norfolcensis*), Eastern Bentwing-bat (*Miniopterus orianae oceanensis*) and Yellow-bellied Sheathtail Bat (*Saccolaimus flaviventris*).

Three migratory species listed under the EPBC were recorded in the project area (EnviroKey, 2018; EMM Consulting, 2019), namely Latham’s Snipe (*Gallinago hardwickii*), Rainbow Bee-eater (*Merops ornatus*) and Fork-tailed Swift (*Apus pacificus*). The Superb Parrot (*Polytelis swainsonii*), a vulnerable species listed under the EPBC Act, was recorded approximately 1 km south of the project area. Additional information on threatened biodiversity in the project area is provided in Attachment 1.

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

The mine development is located in the headwaters of an unregulated stretch of the Belubula River which flows from northeast to southwest through the mine development (Figure 1). The Belubula River is a tributary of the Lachlan River which terminates in the Great Cumbung Swamp near the banks of the Murrumbidgee River to the North East of Balranald – it rarely flows into the Murrumbidgee River which in turn flows to the Murray River.

Several unnamed tributaries flow into the Belubula River. The two largest tributaries combined have a catchment area of approximately 2,440ha.

Carcoar Dam is located on the Belubula River approximately 20 km downstream to the southwest of the mine development (Figure 1). The Dam has a catchment area of approximately 23,000ha and a storage capacity of approximately 35.8GL. The Dam is used primarily for regulated releases for environmental, irrigation, mine water supply, stock and domestic purposes. Some regulated river licences are available downstream of Carcoar Dam on the Belubula River.

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

Soil mapping has been completed for the project area (Figure 5). The southwest corner of the project area contains alluvial dermosols, vertosols, sodosols and kandosols. Alluvial chromosols, sodsols and dermosols are associated with the Belubula River. The western part of the project area contains manganic dermosols and chromosols on Byng volcanics. The central north of the project area is characterised by mesotrophic brown dermosols and chromosols. Manganic chromosols and dermosols on Anson Formation occur mainly east of the Belubula River, with a small area mapped in the north. The eastern part of the project area is characterised by poorly drained brown chromosols and dermosols. Smaller occurrences of red chromosols and dermosols, strongly sodic sodosols also occur in the project area.

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 important or unique values relevant to the project area. The project area has been subjected to considerable long term disturbance through previous agricultural activity and consequently, if any of these features were once present within the project area, they have seen be destroyed or significantly degraded.

The pipeline development traverses a combination of cleared land, forestry tracks and roads, and road reserves. Vegetation corridors exist in various sized patches throughout the length of

the proposed Pipeline Development, with the larger corridors existing at the eastern and western areas, including Sunny Corner State Forest. Where possible existing cleared corridors, easements and tracks would be utilised to traverse these patches where complete avoidance is not possible. Small scale riparian corridors would also be intersected along the length of the pipeline.

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

Four plant community types (PCTs) have been ground-truthed within the project area (Figure 4), comprising

• PCT 654 Apple Box - Yellow Box Dry Grassy Woodland of the South Eastern Highlands;

• PCT 727 Broad-leaved Peppermint – Brittle Gum – Red Stringybark Dry Open Forest on the South Eastern Highlands;

• PCT 951 Mountain Gum – Manna Gum Open Forest of the South Eastern Highlands; and

• PCT 1298 Wet tussock grasslands of cold air drainage areas of the tablelands.

These plant community types have been mapped in accordance with the FBA, and have delineated each PCT into its various condition states. Native vegetation has been mapped in moderate to good condition, however this has been delineated into high, medium, poor and other (ie derived native grassland) condition. Given the high degree of disturbance and modification in the project area, the predominant condition state of vegetation is poor or other. Several patches of woodlands remain, however these are highly fragmented, and isolated from each other by non-native vegetation.

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

Not applicable.

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

Based on the results of previous biodiversity surveys, large portions of the project area have been the subject of extensive agricultural activities over many decades and remaining native vegetation is highly fragmented. Large portions of the project area have been cleared and in many areas, efforts to ‘improve’ the ground vegetation through the sowing of introduced grasses and application of fertilisers has occurred. Grazing by cattle and sheep appears to be widespread and dominates the current activities within the project area, and as a consequence the groundcover and shrub layers throughout the project area are highly denuded.

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

Not applicable.

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

Navin Officer undertook an assessment of the project area between 18 April 2017 and 11 May 2017, with the assistance of the Orange Local Aboriginal Land Council. An additional survey was conducted in January 2019 in an additional area incorporated into the ML application area.

The cultural and archaeological significance of each identified site will be assessed in more detail and the impact of the mine development on each site will be addressed in the EIS.

Heritage surveys have been completed along the pipeline corridor. These surveys will inform an assessment of Aboriginal heritage impacts of the pipeline development to be included in the EIS.

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

The Applicant owns or holds an option to purchase all freehold land relevant to the project area.

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

The following uses are relevant to the project area:

1. Agriculture – primarily grazing of cattle, sheep and more recently goats, with limited dry cropping, including residences.

2. Forestry – to the northeast of the Mine Site.

3. Rural residential – including within Kings Plains to the south of the Mine Site and along Guyong Road to the west of the Mine Site.

4. Residential and industrial – associated with the town of Blayney, approximately 8km to the southwest of the Mine Site.

5. Transport – associated with the Mid-Western Highway, a State Road, immediately to the south of the Mine Site and local roads including Dungeon, Vittoria and Guyong Roads and Pounds Lane.

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.

The natural resources in the project application area include gold, land suitable for agricultural production, water resources, and land which has biodiversity and cultural heritage values.

The project has been designed to efficiently recover the gold resource without unacceptable environmental impacts or impacts on existing and surrounding land uses. The project's surface infrastructure has been designed where possible to avoid sensitive biodiversity areas.

Numerous alternative designs have been prepared and evaluated for the mine development. This process has facilitated the development of a considered, well-designed project that will efficiently recover a highly valuable resource, while minimising environmental impacts and potential land use conflicts and delivering socio-economic benefits to the local and broader communities.

Iterative project planning informed by baseline studies has allowed a range of impacts to be avoided and others to be minimised throughout the life of the project. To compensate for unavoidable disturbance, biodiversity offsets will be provided. The original mine development footprint was 1,138.6 ha (calculated as for the disturbance footprint), and therefore the avoidance footprint is 118.8 ha.

Regis has carried out annual biodiversity surveys within the mine development project boundary (herein referred to as the project area) since acquiring Exploration Licence (EL) 5760 in 2012. These surveys have been carried out in parallel with, and have informed the evolution of the mine development design. This process has ensured the avoidance of environmental constraints including impacts on Box Gum Woodland as far as practicable. As shown in Figure 1, the mining lease (ML) application area is relatively constrained in terms of the broader project

area. This is due to the presence of biophysical strategic agricultural land (BSAL) in the western portion of the project area.

Key avoidance measures to implemented comprise:

• Avoidance of all areas of PCT 645 Moderate/Good (High) condition apart from a small area in the direct footprint of the open cut mine;

• Development of a tailings storage facility which avoids almost all Box Gum Woodland identified within the Tailings Storage Facility (TSF) investigation area identified in the Preliminary Environmental Assessment (PEA) (refer Figure 4), resulting in a clearing reduction of 5.1 ha; and

• Purchase of additional land to the northwest of the PEA project area to accommodate a recirculation water storage. The storage is required to ensure the mine development will operate as a no discharge operation and was originally planned to be located to the north of the TSF within the TSF investigation area shown in Figure 4. However to avoid impact on identified EPBC Box Gum Woodland in this area, the Applicant has relocated this storage partially into the recently acquired properties. Due to the prevailing topography, it has not been possible to shift this water storage to completely avoid native vegetation however all impact to EPBC Box Gum Woodland has been avoided in this portion of the project area.

The anticipated impact of the mine development on a listed ecological community, namely White Box Yellow Box Blakely's Red Gum Woodland and Derived Native Grasslands (Box Gum Woodland) at the time of the pre-referral meeting with DoEE was approximately 33.5 ha. This was a conservative figure based on the preliminary biodiversity assessment results. Since the pre-referral meeting, additional field work has been completed to refine the area of Box Gum Woodland in the project area. Based on the original design, the impact on Box Gum Woodland using the refined mapping would have been approximately 20.7 ha. Additional information on the vegetation mapping refinement methods is provided in Attachment 1.

The tailings storage facility location and mine development project boundary were modified to minimise impacts on Box Gum Woodland. The optimised design will minimise impacts on Box Gum Woodland by approximately 5.1 ha (ie residual impact of approximately 15.6 ha).

Figures 2 and 3 the previous and current mine development and pipeline development and demonstrate how the design has evolved to avoid and or minimise impacts on threatened biodiversity.

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 Applicant would implement the following management and mitigation measures to minimise the potential for unacceptable mine development-related impacts on biodiversity.

• Identify the limit of approved disturbance areas on the ground through the use of permanent markers and ensure that all ground disturbing activities are only undertaken within approved areas.

• Ensure that vegetation is removed in such a way to avoid damage to surrounding vegetation.

• Undertake a pre-clearing inspection to identify and, where practicable, remove nesting or roosting fauna.

• Stockpile vegetation onsite where practicable for use during rehabilitation operations. Larger vegetation may be retained whole for use in rehabilitation operations on site or for regional biodiversity enhancement programs such as re-snagging of rivers.

• Undertake weed management and pest control programs in consultation with surrounding landholders.

• Undertake progressive rehabilitation.

In addition, the Applicant would implement a Biodiversity Offset Strategy in the form of a Biodiversity Stewardship Site(s), or through contribution to the NSW Biodiversity Conservation Fund to retire equivalent biodiversity credits to those generated by the project. It is noted that the draft bilateral agreement has not yet been finalised and it is unclear if payment into the NSW Biodiversity Conservation Fund would satisfy DoEE’s requirements for Box Gum Woodland.

Should this referral to the Commonwealth Minister for the Environment determine the proposed action to represent a Controlled Action, the Applicant will also complete assessment necessary to assess the impact against the requirements of the EPBC Act, including the calculation of an appropriate offset, in accordance with the EPBC Environmental Offset Policy 2012.

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

Listed threatened species and communities - Yes

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.

Not applicable.

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. LFB Resources NL is a 100% owned subsidiary of Regis Resources Ltd. Regis Resources currently operate three gold projects in Western Australia, including several satellite pits and they have a strong record in responsible environmental management.

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.

Not applicable.

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.

LFB Resources NL is a 100% owned subsidiary of Regis Resources Ltd. Regis Resources environmental policy is attached (Attachment 3). Further information is available at http://www.regisresources.com.au/Environment/community-and-environment.html

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?

No

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
Preliminary Environmental Assessment, RW Corkery & Co Pty Ltd (July 2018)	Reliable	Few, as based on detailed studies over many years
Local setting and biodiversity constraints analysis McPhillamys Mine Project, Envirokey 2018	Reliable	Few, as based on field survey data collected over three years
EMM survey data – mine development	Reliable	Few, as based on detailed field surveys
Draft McPhillamys Mine Project Environmental Impact Statement, EMM Consulting, 2019	Reliable	Few, as based on detailed studies
OzArk Environmental and Heritage Management, Water Supply Pipeline, OzArk, 2019 (report in prep)	Reliable	Few, as based on detailed studies

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?

Section 3.1 of the PEA presents a description of the target resource. The resource is a large, low grade gold deposit exposed close to surface. The Applicant considered a range of mining methodologies and alternatives as part of its Preliminary Feasibility Study, including various underground and open cut mining scenarios. Based on that assessment, the Applicant determined that underground mining of the resource would not be feasible.

Underground mining is not a commercially viable option for the project, given the higher costs of underground mining (when compared to open cut mining) and thelow resource grade. Substantial, lower grade sections of the resource would not be recovered, contrary to the object of the *Mining Act 1992* to ensure efficient development of mineral resources in NSW.

In light of the above, open cut mining is the only commercially viable mining method available.

The Applicant has also investigated more than thirty different tailings storage facility options based on the identified potential impacts in relation to environmental impacts, operational aspects and capital costs. As outlined in Section 4.1, the optimised design minimises impact on Box Gum Woodland by approximately 5.1 ha compared to the design shown in the PEA. The project will facilitate the recovery of up to 200,000 ounces of gold per annum. Through the project, the Applicant will develop a valuable resource by providing the necessary capital and skills, without which the resource would remain in situ and the economic and social benefits would be not be realised.

The EIS will present in detail the general evolution of the project and an assessment of alternatives.

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

General Manager, NSW

9.2.2 First Name

Rod

9.2.3 Last Name

Smith

9.2.4 E-mail

RSmith@regisresources.com

9.2.5 Postal Address

Level 2

516 Hay Street
Subiaco WA 6008
Australia

9.2.6 ABN/ACN

ABN

90073478574 - LFB RESOURCES NL

9.2.7 Organisation Telephone

+61 8 9422 2200

9.2.8 Organisation E-mail

RSmith@regisresources.com

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, RODNEY JAMES SMITH, 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: Rod Smith Date: 9/4/19

I, RODNEY JAMES SMITH, the person proposing the action, consent to the designation of LFB RESOURCES NL as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature: Rod Smith Date: 9/4/19

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

General Manager, NSW

9.5.2 First Name

Rod

9.5.3 Last Name

Smith

9.5.4 E-mail

RSmith@regisresources.com

9.5.5 Postal Address

Level 2

516 Hay Street
Subiaco WA 6008
Australia

9.5.6 ABN/ACN

ABN

90073478574 - LFB RESOURCES NL

9.5.7 Organisation Telephone

+61 8 9422 2200

9.5.8 Organisation E-mail

RSmith@regisresources.com

Proposed designated proponent - Declaration

I, RODNEY JAMES SMITH, 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: 9/4/19

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Principal Ecologist

9.8.2 First Name

Katie

9.8.3 Last Name

Diver

9.8.4 E-mail

kdiver@emmconsulting.com.au

9.8.5 Postal Address

20 Chandos Street
St Leonards NSW 2065
Australia

9.8.6 ABN/ACN

ABN

28141736558 - EMM CONSULTING PTY LIMITED

9.8.7 Organisation Telephone

02 9493 9500

9.8.8 Organisation E-mail

kdiver@emmconsulting.com.au

Referring Party - Declaration

I, Katie Diver, 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: Diver Date: 9/4/19

Appendix A - Attachments

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

1. Attachment 3 Regis Envionmental Policy 2019.pdf
2. DisturbanceBoundary_04pg_EMM_20190220.zip
3. Figure 1 - EPBC001_ProjectArea_20190315_01.pdf
4. Figure 2 - EPBC002_MineLayout_20190315_01.pdf
5. Figure 3 - EPBC003_MineEvolution_20190315_01.pdf
6. Figure 4 - EPBC004_MineSiteEcology_20190315_01.pdf
7. Figure 5 - EPBC005_SoilMapping_20190315_01.pdf
8. Figure 6 - EPBC006_ProtectedMatters_20190315_01.pdf
9. J180395_Attachment 1 - Mine development supplementary information_V2.pdf
10. J180395_Attachment 2 - Pipeline development supplementary info_V2.pdf