

Title of Proposal - Extractive Industry ('Rockwood Quarry'), Table Top, 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.

The proposal as described and assessed in the draft NSW Environmental Impact Statement (EIS) prepared by Habitat Planning (2019) involves the continuation of existing quarrying activities, and the expansion of existing Pit 3 on the subject land (Figure 2 attached at Section 1.4). Works associated with the continuation of quarrying activities on the subject land are being approved through a NSW approvals and are not expected to impact on any Matters of National Environmental Significance (MNES). Therefore, the continuation of existing quarrying activities on other parts of the subject land are not discussed further in any detail in this referral.

This referral relates specifically to the expansion of Pit 3 (the development area) that will involve an increase in the existing quarry's footprint that would result in the removal of native vegetation, including the EPBC Act listed threatened ecological community (TEC) White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland.

Proposed activities associated with the expansion of Pit 3 would include:

- Increase in the maximum annual extraction of crushed rock from 75,000 cubic metres to 100,000 cubic metres per annum to cater for the long-term needs of the quarry;
- Expansion of Pit 3 in a north easterly direction consistent with a previous approval issued for the site (see Development Consent No. 10.2008.28631.3 issued on 21 September 2017 by Albury City Council);
- Crushing and recycling of an annual maximum of 20,000 tonnes of solid concrete waste from residential, industrial and commercial sites (Pit 3 only);
- Removal of native vegetation; and
- Rehabilitation of old quarry pits and offset plantings (see Rehabilitation Plan attached in Section 4.3).

A number of terms are used throughout this referral and are defined here:

- Original proposed extension proposal as assessed in original EIS
- Revised proposed extension proposal reduced and reconfigured to minimise impacts on Box Gum Woodland subject to revised EIS to be submitted in 2019
- Subject land Wider area contained within property boundaries that has been subject to biodiversity assessments and other studies
- Development area Proposed expansion area to Pit 3
- Box Gum Woodland White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (EPBC listing), White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion (NSW listing)

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
Rockwood Quarry - subject land	1	-35.980915359728	146.96238513992
Rockwood Quarry - subject land	2	-35.980741721322	146.96253534363
Rockwood Quarry - subject land	3	-35.980099255896	146.96326490448
Rockwood Quarry - subject land	4	-35.979005316245	146.9646381955
Rockwood Quarry - subject land	5	-35.978762216485	146.96549650238
Rockwood Quarry - subject land	6	-35.979005316245	146.96727748917
Rockwood Quarry - subject land	7	-35.979595698258	146.97060342835
Rockwood Quarry - subject land	8	-35.98016871187	146.97437997864
Rockwood Quarry - subject land	9	-35.980672265852	146.97704072998
Rockwood Quarry - subject land	10	-35.980915359728	146.97744842575
Rockwood Quarry - subject land	11	-35.981575182188	146.97794195221
Rockwood Quarry - subject land	12	-35.982912173941	146.97740551041
Rockwood Quarry - subject land	13	-35.982460724714	146.9767188649
Rockwood Quarry - subject land	14	-35.983363620587	146.97513099716
Rockwood Quarry - subject land	15	-35.984735308008	146.97064634369
Rockwood Quarry - subject land	16	-35.985846530967	146.96916576431
Rockwood Quarry - subject land	17	-35.986593125103	146.96631189392
Rockwood Quarry - subject land	18	-35.985447187018	146.96624752091
Rockwood Quarry - subject land	19	-35.985186744223	146.96545358704
Rockwood Quarry - subject land	20	-35.984752670987	146.96427341507
Rockwood Quarry - subject land	21	-35.984162327555	146.96287866638
Rockwood Quarry - subject land	22	-35.983780338274	146.96251388596

Area	Point	Latitude	Longitude
subject land			
Rockwood Quarry -	23	-35.983051080877	146.96204181717
subject land			
Rockwood Quarry -	24	-35.982998990805	146.96161266373
subject land			
Rockwood Quarry -	25	-35.982964264071	146.96129079865
subject land			
Rockwood Quarry -	26	-35.982912173941	146.96107622192
subject land			
Rockwood Quarry -	27	-35.982582268991	146.96094747589
subject land			
Rockwood Quarry -	28	-35.982478088193	146.96103330658
subject land			
Rockwood Quarry -	29	-35.982044000057	146.96148391769
subject land			
Rockwood Quarry -	30	-35.981523091142	146.96193452881
subject land			
Rockwood Quarry -	31	-35.981227907897	146.96214910553
subject land			
Rockwood Quarry -	32	-35.980915359728	146.96238513992
subject land			

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 subject land is described as Lot 2 in Deposited Plan (DP) 1018401 and Lot 3 in DP 233061 within the Albury Local Government Area, Parish of Jindera and County of Goulburn. The subject land is located on Nine Mile Hill on the western side of Gerogery Road approximately 10 kilometres north of Albury, New South Wales (Figures 1 and 2 attached at Section 1.4).

The subject land is 189.33 hectares in size and is generally irregularly shaped. The topography of the land is undulating and in parts quite steep (10-20% slope) as it forms part of Nine Mile Hill. Primary vehicular access to the site is from the unsealed Winchester Lane. A secondary unsealed access point also exists approximately 1.2 kilometres further south towards the Nexus industrial estate.

The land is generally rural in nature and contains a number of patches of native vegetation and isolated/scattered paddock trees and unimproved pastures, as well as a number of dams. Towards the crest of Nine Mile Hill, the landform has a rocky outcrop, which is a primary source of extractive materials and road base for construction activities. The subject land has principally been used for the purposes of an extractive industry, with quarrying activities occurring on-site since the pre-1970s.

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

Subject land is 189.33 hectares and irregular in shape. The 'revised' proposed expansion (related to Pit 3) is 12.67 hectares.

1.7 Is the proposed action a street address or lot?

Street Address

208 Winchester Lane,
Table Top NSW 2640
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?

Yes

1.10.1 Is there a local government area and council contact for the proposal?

Yes

1.10.1.0 Council contact officer details

1.10.1.1 Name of relevant council contact officer.

Terri O'Brien, Senior Town Planner, Albury City Council

1.10.1.2 E-mail

TOBrien@alburycity.nsw.gov.au

1.10.1.3 Telephone Number

02 6023 8266

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

Start date 03/2019

End date 12/2049

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

Commonwealth

Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) applies to actions that have the potential to significantly impact on Matters of National Environmental Significance (MNES) protected under the EPBC Act.

State

Environmental Planning & Assessment Act (EPA) 1979

The project is considered to be 'designated development' or high impact development that is likely to generate pollution. It is also 'integrated development' that not only requires consent but also requires additional approvals under related legislation. Developments that are deemed to be designated and/or integrated require consent under the EPA Act 1979.

As the development involves an extractive industry, the application will be referred to the Southern Joint Regional Planning Panel (JRPP) for determination.

Biodiversity Conservation (BC) Act 2016

The BC Act is the key piece of legislation providing for the protection and conservation of biodiversity in NSW through the listing of threatened species, populations and communities, key threatening processes and critical habitat for threatened species, populations and communities. Impacts to threatened species, populations and communities are assessed under Section 7 of the BC Act, which includes Section 7.3 of the BC Act.

National Parks and Wildlife (NPW) Act 2000 and the National Parks and Wildlife Amendment Act 2010

The NPW Act provides for the protection of Aboriginal objects and Aboriginal places. Under Section 90 of the NPW Act it is an offence to knowingly destroy, deface, damage or desecrate, or cause or permit the destruction, defacement, damage or desecration of an Aboriginal object or Aboriginal place, without the prior written consent from the Director General of the OEH. Under section 89A of the Act it is a requirement to notify the Director-General (OEH) of the location of an Aboriginal object. Identified Aboriginal objects and sites are registered with NSW on the Aboriginal Heritage Information Management System (AHIMS). Procedures that accompany the *National Parks and Wildlife Amendment Act 2010* include the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 and the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW.

Biosecurity Act 2015

The Biosecurity Act introduces the concept of Priority Weeds. A priority weed is any weed identified in a local strategic plan, for a region that includes that land or area, as a weed that is or should be prevented, managed, controlled or eradicated in the region.

The Biosecurity Act also introduces the General Biosecurity Duty, which states:

All plants are regulated with a general biosecurity duty to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable.

No Priority Weeds for Murray LLS region, which includes the Albury Council LGA, have been recorded in the subject land.

Protection of Environment Operations Act 1997

The *Protection of the Environment Operations Act 1997* (POEO Act) provides the statutory framework for managing pollution and waste in NSW, including the procedures for issuing licences for environmental protection on aspects such as waste, air, water and noise pollution control. Activities undertaken onsite must not contribute to environmental degradation, and pollution and air emissions must not exceed the standards. Where an environment protection licence applies, waste management requirements and air quality requirements (including criteria) may be specified by the licence.

Given the nature of the proposed activities conducted on-site, an EPA licence is required under the POEO Act in relation to the following activities:

Crushing, grinding or separating of more than 30,000 tonnes of material processed; Extractive industry that extracts, processes or stores more than 50,000 tonnes of material; and Waste disposal (by application to land) (subject to a separate approval and valid ongoing).

Albury Local Environmental Plan (ALEP) 2010

The majority of the proposed Pit 3 expansion area is zoned RU2 Rural Landscape (approximately 3.62 ha) with the remaining area zoned E3 Environmental Management (approximately 2.42 ha) under the *Albury Local Environmental Plan 2010*. It is noted that the ALEP was conferred biodiversity certification by NSW OEH and the subject land is located wholly within 'Biodiversity Certified' land under the ALEP. Therefore, development on biodiversity certified land is taken to be development that is not likely to significantly affect any threatened species, populations or ecological communities or its habitat at a State (NSW) level only.

Although the consent/determining authority is not required to take into consideration the likely impact of the development on biodiversity values, it can still require consideration of environmental impacts, including to biodiversity under Section 4.15 of the EP&A Act.

In accordance with the Biodiversity Certification of Environmental Planning Instruments Order

2017 (NSW Government Gazette 126) that was gazetted after the introduction of the *Biodiversity Conservation Act 2016*, the Albury Biodiversity Certification does not apply to any land that is both:

within the area identified as the Biodiversity Certified Area in Schedule 1 of the Albury Biodiversity Certification, and excluded land.

In this case 'excluded land' refers to all land subject to the ALEP, other than land that was, immediately prior to the commencement of the *Biodiversity Conservation Act 2016*, zoned:

Business (B1-B8), or Industrial (IN1-IN4), or Residential (R1-R5)

Because the revised proposal would result in the removal of 1.25 hectares of remnant Box Gum Woodland from land zoned E3 Environmental Management, which is shown in Schedule 1 of Albury's Biocertification scheme and is not excluded land, an appropriate State-level offset is required to compensate for removal of native vegetation as per DECCW (2009).

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

As part of the NSW EIS process, consultation was undertaken with the following public authorities:

- Environment Protection Authority (air quality, noise and vibration, water and soil quality, waste, chemicals and hazardous materials)
- Department of Planning and Environment (SEARs, timing and scope of the proposal)
- Office of Environment and Heritage (Aboriginal and biodiversity impacts, cumulative impacts)
- Water NSW (access to and impacts to surface and grounds, flooding, impact on waterfront land)
- NSW Native Title Services Corporation Limited (NTSCORP Limited)
- Office of the Registrar, Aboriginal Land Rights Act 1983 of Aboriginal Owners
- National Native Title Tribunal (NNTT)
- Albury Local Aboriginal Land Council (ALALC)
- Murray Local Land Services (E3 vegetation, Aboriginal stakeholders)
- Department of Industry – Resources and Energy
- Department of Industry – Lands (Crown Lands)
- Murray Local Land Services (formerly Catchment Management Authority)

- Albury City Council (various issues).

Consultation has been undertaken with the local community via letters.

The Aboriginal stakeholders that have been consulted by public notice include:

- Mungabareena Aboriginal Corporation
- Wiradjuri Council of Elders
- Other individual Aboriginal stakeholders (names can be provided subject to permission from these stakeholders).

Post-lodgement of the EIS, consultation was undertaken with representatives from the OEH and from Albury City Council on 7 June 2018. Issues discussed included the need for the following:

- To extend the archaeological survey to the complete development footprint to include all 'activity areas' (i.e. not just the proposed expansion area);
- To include a buffer to indicate the full extent of Box Gum Woodland;
- To undertake an ecological impact assessment despite biocertification;
- To undertake a targeted survey for the Pink-tailed Worm-lizard;
- To avoid native vegetation in the E3 zone, if possible, and to offset if it cannot be avoided.

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 EIS has been drafted for submission to the NSW Department of Planning & Environment (DPE) and Albury City Council pursuant to Section 78A (8A) of the *Environmental Planning & Assessment Act 1979* (EP&A Act) and Schedule 2 of the *Environmental Planning & Assessment Regulation 2000* (EP&A Regulation). The draft EIS has been prepared by Habitat Planning (2019) in accordance with the Secretary's Environmental Assessment Requirements (SEARs) issued by DPE on 5 September 2016 and further advice provided by DPE on 16 March 2018.

The EIS (Habitat Planning 2016) assessed the original proposed expansion area that measured approximately 14 hectares and comprised 7.41 hectares of native vegetation, including 1.74 hectares of Box Gum Woodlands TEC (later remapped as 2 hectares) and 5.67 hectares of *Speargrass – Redleg Grass derived grassland on hills in the Jindera to Holbrook region, southern NSW South Western Slopes bioregion*.

The EIS concluded that there would be no significant environmental, social or economic impacts as a result of the original proposed extension. In a subsequent biodiversity report, Biosis (2018) (attached to this referral in Section 2.14) concluded that the original proposed extension would not result in any significant impacts on threatened communities/species but recommended that the proponent re-define the scope of the expansion to avoid as much Box Gum Woodland as possible. As the revised proposed extension fits entirely within the boundaries of the original proposed extension, it is not expected to have any significant impacts on MNES or state-listed threatened communities/species.

The draft EIS addressing a number of issues raised by relevant government agencies and Council during assessment is currently being prepared (Attached at Section 2.14).

Assessment of MNES

An assessment of MNES undertaken by Biosis (2018) for Box Gum Woodland, Swift Parrot and Pink-tailed Worm-lizard (Michael 2018) (attached to this referral at Section 2.14) concluded that the original proposed extension would not significantly impact any threatened communities/species.

Three threatened flora species were considered to have a low or negligible likelihood of occurring in the subject land due to historical grazing and quarrying activities.

Fourteen migratory species recorded or predicted to occur within 10 kilometres of the subject land. While some of these species would be expected to use the subject land on occasions, and some of them may do so regularly or may be resident, it does not provide important habitat for an ecologically significant proportion of any of these species.

Notwithstanding these assessments, Biosis (2018) recommended that, due to the risk of multiple MNES being potentially affected and the need for legal certainty, the project be referred to the Australian Government for determination.

Assessment of state significant species

A Test of Significance under the NSW BC Act was not required as the proposed development is located wholly within biodiversity certified land. However, as the determining authority may still require consideration of environmental impacts, an ecological assessment was undertaken as part of the EIS. It was concluded that the original proposed expansion is unlikely to have significant impacts on Box Gum Woodland, five threatened flora species or on 18 threatened fauna species that were considered most likely to utilise habitat within the development area (Biosis 2018).

As the revised proposed expansion fits entirely within the boundaries of the original proposed expansion area and reduces losses of native vegetation by 1.1 hectares, the biodiversity assessment undertaken as part of the EIS still applies.

Cultural Assessment

As part of the EIS, Aboriginal heritage values were assessed only for the expansion area and not for the entire study site as per the SEARs. Further assessment since then has confirmed

that the proposed development area contains no recorded Aboriginal sites/objects and the potential risk of harming Aboriginal cultural heritage items is low.

An Aboriginal Cultural Heritage Assessment (ACHA) Report was initially undertaken for the original proposed expansion area of Pit 3 by Biosis in 2017. There are no Aboriginal cultural heritage sites registered with the Aboriginal Heritage Information Management System (AHIMS) register in the subject land. During the field survey, two of the Registered Aboriginal Parties (RAPs) indicated that the granite boulders in the north-eastern corner of the subject land may be an important ceremonial area; this was considered to be an intangible place of moderate cultural significance, although that significance was not clearly defined and specific examples were not provided. As this area is not associated with any tangible Aboriginal cultural heritage site/object or potential archaeological deposit (PAD), it cannot be recorded in AHIMS. In addition, the site does not meet the criteria to be declared as an Aboriginal place under section 84 of the NPW Act. Only Aboriginal objects and Aboriginal places are protected under the NPW Act. As such an AHIP was not required for this site. Given there are no recorded Aboriginal sites/objects recorded in the subject land, the potential risk of harming Aboriginal cultural heritage is low.

It was concluded that no further archaeological investigation or works were required to be undertaken. However, it was recommended that all works must cease if Aboriginal objects or places are identified during construction. If any suspected human remains are discovered during any activity works, all activity in the vicinity must cease and the Coroner's Office and the NSW Police must be notified immediately.

The ACHA report was prepared as part of the EIS for the project which is currently being modified to address issues raised by Albury City Council and OEH. The OEH response to DPE dated 25 August 2016 indicated that, in order to meet the SEARs, the ACHA should be extended to include the complete development footprint (and not just the expansion area). Further survey work has been undertaken and it has been confirmed that there are no recorded Aboriginal sites/objects located within the development footprint. An amended ACHA report is currently being prepared.

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

Yes

1.15.1 Provide information about the larger action and details of any interdependency between the stages/components and the larger action.

A staging plan has been prepared for the quarry expansion (Attached at Section 2.14), which identifies that the quarry expansion will be extend northwards (Stages 2 & 3) and will then continue east and north-easterly (Stages 4-6), over the following approximate timeline:

Stage 2: 2019-2024;

Stage 3: 2024-2029;

Stage 4: 2029-2034;

Stage 5: 2034-2039.

Stage 6: 2039-2044.

Consequently, the southernmost section of Box Gum Woodland would not be removed until a minimum of 15 years post-approval (2029).

The action referred here covers all stages of future quarry expansion.

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 (Box Gum Woodland)	Removal of 1.25 hectares. Other native vegetation on the subject land or in the development area does not quality as this

Species	Impact
	<p>community based on the assessment against listing and policy advice (see Biosis 2018, Appendix 5). Plant Community Type 266 was found to meet the listing criteria as the Box Gum Woodlands TEC, listed as critically endangered under the EPBC Act. Plant Community Type 266 was recorded on the slopes and hills to the north and east of the existing quarry where the canopy remains relatively intact, PCT1000 was recorded where the canopy has been historically removed but the understorey remains native (Figure 2 attached a Section 1.4). Listing advice and the supporting policy statement describe Box Gum Woodland in two condition states; an intact woodland form and a derived native grassland form where tree cover has been historically removed. The community was recorded only as a woodland (Biosis 2018, Appendix 5, Table 4 for justification). The decision process for attributing a patch of PCT266 or PCT1000 to the threatened community relies on the observed dominance of <i>Eucalyptus blakelyi</i>, <i>Eucalyptus melliodora</i> or <i>Eucalyptus albens</i>, patch size, weed cover and species diversity. A total of 25.6 hectares of the Box Gum Woodlands community occurs across the subject land (Figure 2 attached a Section 1.4) and was found to meet the listing criteria as set out in DEH (2006) (Biosis 2018). Although the majority of this area has been impacted by livestock grazing and historical clearing, and is generally depauperate, the presence of a predominantly native understorey and White Box and Blakely's Red-gum trees at a density of greater than 20 trees per hectare on average and containing natural regeneration of the canopy, ensured these areas met the listing criteria. The understorey quality of these areas is also likely to increase if grazing pressures are removed. It should be noted that only the impact area was assessed in detail. Of this total, 1.25 hectares occurs within the quarry expansion footprint and is likely to be impacted (Figure 3 attached a Section 1.4). These impact areas include lower quality vegetation to the east of the existing quarry and higher quality areas to the northeast and north. The remaining</p>

Species	Impact
	<p>areas of PCT1000 (derived grassland) did not meet the listing criteria because these areas did not contain 12 herbaceous species in the understorey, were in a poor condition state and did not meet the mature tree densities required to meet the community listing criteria.</p>
<p>Threatened flora species: - Small Purple-pea, <i>Swainsona recta</i>, Endangered under the EPBC Act - River Swamp Wallaby-grass, <i>Amphibromus fluitans</i>, Vulnerable under the EPBC Act - Crimson Spider Orchid, <i>Caladenia concolor</i>, Vulnerable under EPBC Act</p>	<p>Three threatened flora species listed under the EPBC Act are known from the local area. However, all are considered to have negligible to low probability of occurring in the subject land and development area due to ongoing grazing pressures and historical disturbance associated with quarry development.</p>
<p>Swift Parrot</p>	<p>Removal of 19 potential foraging trees and 6.04 ha of potential habitat. The subject land also contains suitable habitat for the Swift Parrot that is Critically Endangered under the EPBC Act. Due to the Swift Parrot's migratory nature, it cannot be discounted from occurring wherever there are suitable flowering resources in southern NSW. However, the availability of resources in the broader landscape means that tree removal associated with the quarry expansion will not lead to any decline in the species' overall abundance or area of occupancy. Furthermore, the vegetation within the subject land is unlikely to constitute critical habitat for this species. An assessment against the Significant Impact Criteria was undertaken for this species and is included in Appendix 5 of Biosis (2018) (attached to referral).</p>
<p>Pink-tailed Worm-lizard</p>	<p>Removal of 2.25 hectares of potential low quality habitat. The Pink-tailed Worm-lizard, listed as Vulnerable under the EPBC Act, potentially occurs within the subject land. A targeted field survey for this species was conducted by Dr Damien Michael in potentially suitable habitat (i.e. along the north-western facing slope of the quarry extension area) on 1 June 2018 (Michael 2018, attached at Section 2.14). No direct evidence of this species was found in the subject land and, based on existing information and habitat assessment, Dr Damien Michael concluded that the probability of the Pink-tailed Worm-lizard being found on the site is low. An assessment against the Significant Impact Criteria was undertaken for this species and is included in Appendix 5 of Biosis (2018)</p>

Species	Impact
	(attached to referral). Notwithstanding this result, Michael (2018) recommended that a transect line of 40 roofing tiles be laid in clusters of four extending every 40 metres along the north-west facing rocky slope of the proposed expansion site. Tiles should be checked for host ant species and sheltering PTWLs on a monthly basis between August and November for a minimum of three years, in conjunction with searches of suitable rocks.
Migratory species, these include Common Sandpiper, Fork-tailed Swift, Cattle Egret, Eastern Great Egret, Sharp-tailed Sandpiper, Pectoral Sandpiper, Latham's Snipe, White-throated Needletail, Caspian Tern, Rainbow Bee-eater, Black-faced Monarch, Yellow Wagtail, Satin Flycatcher and Rufous Fantail.	14 species of migratory birds are recorded or predicted to occur within 10 kilometres of the subject land. While some of these species would be expected to use the subject land on occasions, and some of them may do so regularly or may be resident, it does not provide important habitat for an ecologically significant proportion of any of these species.

2.4.2 Do you consider this impact to be significant?

No

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

Yes

2.5.1 Impact table

Species	Impact
14 Migratory species, these include Common Sandpiper, Fork-tailed Swift, Cattle Egret, Eastern Great Egret, Sharp-tailed Sandpiper, Pectoral Sandpiper, Latham's Snipe, White-throated Needletail, Caspian Tern, Rainbow Bee-eater, Black-faced Monarch, Yellow Wagtail, Satin Flycatcher and Rufous Fantail.	Removal of 19 potential foraging trees for non-wetland birds and 6.04 ha of potential terrestrial habitat. While some of these species would be expected to use the subject land on occasions, and some of them may do so regularly or may be resident, it does not provide important habitat for an ecologically significant proportion of any of these species.

2.5.2 Do you consider this impact to be significant?

No

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

No

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

No

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

No

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

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.

The subject land contains native vegetation, some of which is contiguous with native vegetation on adjacent properties and road reserves. The condition of native vegetation within the subject land is a function of past land uses. The entirety of the subject land and development area has had some modification to the canopy with historical tree removal occurring for timber harvesting or pasture improvement. Higher quality woodland remnants occur on hilltops and rocky rises where the canopy remains relatively intact and the understorey is predominantly native. Derived grasslands occur on the slopes and valley floors where the canopy has been mostly removed but the understorey remains native. The eastern portion of the subject land has been grazed extensively by cattle while the western and northern sections have been excluded from grazing, with the exception of minor grazing by Eastern Grey Kangaroo *Macropus giganteus*.

Native vegetation within the subject land consists of *PCT 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion* where the canopy remains and *PCT 1000: Speargrass – Redleg Grass derived grassland on hills in the Jindera to Holbrook region, southern NSW South Western Slopes bioregion* where the canopy has been historically removed.

Specifically, the following threatened species/communities are known to occur or potentially occur within the subject land and surrounds:

- 25.6 ha of Box Gum Woodlands Critically Endangered Ecological Community (EPBC Act) was identified within the subject land (including 2.42 ha in the revised proposed development area);
- The Swift Parrot has been recorded sporadically around the subject land and is listed as a Critically Endangered under the EPBC Act. The subject land contains native woodlands dominated by White Box that would provide a foraging resource for this nectar and lerp dependent species. The Swift Parrot has the potential to be an occasional visitor to the subject land during autumn and winter.
- The Pink-tailed Worm-lizard, listed as Vulnerable on the EPBC Act, has a low likelihood of occurring in the subject land according to an assessment by Michael (2018, attached at Section 2.14).
- While some migratory species would be expected to use the subject land on occasions, and some of them may do so regularly or may be resident, it does not provide important habitat for an ecologically significant proportion of any of these species.- Five threatened flora species listed under the EPBC Act and / or the BC Act are known from the local area/region and all have a negligible to low likelihood of occurring in the subject land or development area:

- Small Purple-pea, *Swainsona recta*, Endangered under the EPBC Act, Endangered under the BC Act

- River Swamp Wallaby-grass, *Amphibromus fluitans*, Vulnerable under the EPBC Act, Endangered under the BC Act.

- Crimson Spider Orchid, *Caladenia concolor*, Vulnerable under EPBC Act, Vulnerable under the BC Act - Small Scurf-pea, *Cullen parvum*, Endangered under the BC Act - Woolly Ragwort, *Senecio garlandii*, Vulnerable under the BC Act- Eighteen threatened fauna species listed under the BC Act were considered most likely to utilise habitat within the subject land (Biosis 2018).

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

A portion of the subject land is located within the Eight Mile Creek Catchment area due to its proximity to Eight Mile Creek, which is located approximately 600 metres south of the existing quarry. This catchment is the largest local catchment area (65 km²) within the Albury LGA and eventually drains into the Murray River. Given the location and distance of the subject land from the Murray River and other local waterways, including Eight Mile Creek, the land is not subject to either riverine flooding.

The subject land contains a number of natural drainage lines and depressions that drain into a number of holding/settling dams with surface areas ranging in size from 120 m² up to 860 m². These dams act as a natural filter for stormwater run-off and hold, treat and filter the stormwater before being discharged off-site, thereby maintaining pre-development flows and ensuring stormwater quality prior to any discharge into local waterways further downstream.

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

Soil conditions on-site comprise harder diorite granites overlain by 6 to 8 metres of moderately to highly weathered granites, which in turn are overlain by very highly weathered granite gravels and clay. Also present on-site is a topsoil layer nominally 100 millimetres thick that contains a layer of naturally occurring grasses and vegetation. The land is generally rural in nature and contains a number of patches of native vegetation and isolated/scattered paddock trees and unimproved pastures, as well as a number of dams.

The entirety of the subject land has had some modification to the canopy with historical tree removal occurring for timber harvesting or pasture improvement. Higher quality woodland remnants occur on hilltops and rocky rises where the canopy remains relatively intact and the understorey is predominantly native. Derived grasslands occur on the slopes and valley floors where the canopy has been predominantly removed but the understorey remains native. The eastern portion of the land has been grazed extensively by cattle while the western and northern sections have been excluded from grazing, with the exception of minor native grazing by Eastern Grey Kangaroo. A section of the subject land to the north-east of Pit 3 (being former Pit 2) has been impacted by past quarrying activities and now contains predominantly introduced vegetation.

Woodland areas contain a relatively sparse canopy dominated by White Box *Eucalyptus albens* with some Blakely's Red-gum *Eucalyptus blakelyi* and Apple Box *Eucalyptus bridgesiana* present. The mid-storey is sparse to absent but where present includes Kurrajong *Brachychiton populneus* subsp. *populneus* and Hickory Wattle *Acacia implexa*. The groundcover consists predominantly of grazing tolerant native grasses including Red-leg Grass *Bothriochloa macra*, Lobed Wallaby-grass *Rytidosperma auriculata*, Common Wheatgrass *Elymus scaber* var. *scaber* and Umbrella Grass *Digitaria divaricatissima*. A sparse herb layer is present and includes Cranesbill Geranium *Geranium retrorsum*, Rock Isotome *Isotoma axillaris* and Rock Fern *Cheilanthes sieberi* subsp. *sieberi*.

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

No outstanding natural features, important or unique values have been identified on the subject land or within the development area.

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

Native vegetation within the subject land consists of PCT266: *White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion* where the canopy remains and PCT 1000: *Speargrass – Redleg Grass derived grassland on hills in the Jindera to Holbrook region, southern NSW South Western Slopes bioregion* where the canopy has been historically removed. Plant Community Type 266 was found to meet the listing criteria as the Box Gum Woodlands Threatened Ecological Community, listed as critically endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Albeit, these examples of the threatened community are in poor condition due to past and present land uses.

3.6 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 subject land is undulating and in parts quite steep (10-20% slope) as it forms part of Nine Mile Hill. Consequently, there are a number of changes of terrain over the site ranging from 250 metres Australian Height Datum (AHD) in the south-eastern corner of the site, up to 360 metres AHD at the crest of the hill generally located within the centre of the site.

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

The subject land and development area are rural landscapes that contain fragmented poor quality native vegetation and pasture. The condition of native vegetation within the subject land is a function of past land uses. The entirety of the site has had some modification to the canopy with historical tree removal occurring for timber harvesting or pasture improvement. Past quarrying activities have also resulted in modifications to the subject land through earthworks and road building.

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

There are no Commonwealth Heritage Places in the vicinity of the subject land.

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

There are no Aboriginal cultural heritage sites registered with the Aboriginal Heritage Information Management System (AHIMS) register in the subject land. The outcome of the consultation process was that the Registered Aboriginal Parties considered the subject land to contain an intangible place of moderate cultural significance, although that significance was not clearly defined and specific examples were not provided. As this area is not associated with any tangible Aboriginal cultural heritage site/object or potential archaeological deposit (PAD), it cannot be recorded in AHIMS. In addition, the site does not meet the criteria to be declared as an Aboriginal place under section 84 of the NPW Act. Only Aboriginal objects and Aboriginal places are protected under the NPW Act. As such an Aboriginal Heritage Impact Permit (AHIP) was not required for this site.

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

The subject land and development area are privately owned by AP Delaney & Co Pty Ltd (freehold).

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

The subject land has been operating as an extractive industry with associated works including the crushing of recycled concrete and the disposal of biosolid waste for the past 45 years. The current proposal seeks to expand operation of the quarry and ancillary activities for a further 30 years. The subject land is also used for livestock grazing and other rural activities.

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.

Throughout the assessment process, attempts have been made to avoid, minimise, mitigate and offset ecological impacts.

Avoidance and minimisation

The expansion to Pit 3 has been limited to the immediate surrounding areas of the existing operation and other ridgeline areas that could be quarried have been avoided. The original proposed expansion, as assessed in the EIS (Habitat Planning 2016), would have resulted in the loss of 7.41 hectares of native vegetation including 1.74 hectares of Box Gum Woodland (remapped as 2 hectares post-EIS).

As a result of recommendations contained in Biosis (2018) and discussions held with OEH post-EIS, the development footprint was remapped and reduced. The revised proposed expansion area would result in a loss of 6.04 hectares of native vegetation, of which 1.25 hectares qualifies as the EPBC listed Box Gum Woodland. This represents a reduction in the loss of native vegetation of 1.37 hectares and a reduction in impacts on Box Gum Woodland of 0.75 hectares (down from 2 hectares mapped due the post-EIS consultation with OEH).

A map showing the steps taken to avoid and minimise impacts is provided as Figure 4 and has been uploaded in Section 1.4 of the referral.

Mitigation

Mitigation measures recommended by Biosis (2018) that will be implemented during the design and operation stages include:

- Avoid/minimise disturbance to any native vegetation surrounding the expansion area by fencing off all retained vegetation;
- Where possible, any trees to be retained should be protected in accordance with Australian Standard AS4970 – 2009 Protection of trees on development sites, during construction, operation and decommissioning of the site compound;

- In the unlikely event that unexpected threatened species (e.g. Pink-tailed Worm-lizard) are identified during the project, works should cease and an ecologist contacted;
- Implement a sediment and erosion control plan to avoid indirect impacts to surrounding biodiversity values;
- Implement a site management plan (EMP);- Hollow-bearing trees to be removed in a two-stage process;
- Stage 1: All surrounding vegetation to be cleared and grubbed;
- Stage 2: 24 to 48 hours later (or in accordance with approval docs) the hollow-bearing trees to be inspected by an ecologist. If resident fauna is observed, the hollow section is to be lowered to the ground and the animal allowed to move on of its own volition. If injured, the fauna to be taken to a WIRES carer or appropriate veterinarian for care;
- Removal of any noxious weed material, including checking and cleaning earthmoving equipment prior to moving to another site;

Rehabilitation and Offsets

Key measures to offset vegetation removal and rehabilitate the development area include:

- Undertake infill revegetation of proposed offset area in accordance with the guidelines set out in the Vegetation Management Plan (VMP attached at Section 4.3);
- Undertake staged and ongoing site rehabilitation works ('retreat method') once an area has been exhausted (see Rehabilitation Plan attached in Section 4.3);
- Upon exhaustion of all extractive materials, rehabilitate the entire site back to pre-development conditions (i.e. rural paddocks and grasslands); and
- Prevent stock access to the site after rehabilitation to allow for native re-growth.

The revised proposed extension area would result in the loss of 2.42 ha of native vegetation zoned E3 and this will require State-level offsets. To compensate for this loss, an appropriate offset has been proposed on-site that comprises infill revegetation of two areas covering approximately 15 hectares (see Figure 5 attached at Section 1.4). Offsets would connect two existing areas of vegetation zoned E3 Environmental Management to form a broad corridor extending eastwards to vegetated Crown land. The planting would include 250 trees to replace the 19 trees to be removed in Box Gum Woodland areas at a ratio of 10:1 and would also include additional 60 trees to ensure appropriate survival rates in the medium to long-term. Revegetation would also include approximately 1400 shrubs/groundcover species in order to provide suitable mid-stratum layers to attract a diversity of woodland birds. Although the offset sites comprise a relatively intact native ground cover (mainly grasses), additional species would be planted to increase habitat complexity for fauna species (i.e. insectivorous birds). The planting, management and maintenance of the offsets would follow the guidelines set out in a Vegetation Management Plan presently being prepared for the site (VMP attached at Section 4.3).

The Vegetation Management Plan (attached at Section 4.3) recommends that site preparation and 60% of the revegetation planting take place as soon as possible post-approval (i.e. May or June in Year 1, depending on suitable seasonal conditions) with the remaining 40% to be undertaken the following year (i.e. Year 2). Planting would be undertaken in accordance with species, methods, staging and maintenance schedules outlined in the VMP. This would allow new plantings to become established prior to the removal of Box Gum Woodland, which is likely to begin in 2029.

Rehabilitation works will also be staged commensurate with site activities to ensure that those areas no longer required for extractive industry purposes are rehabilitated and returned to former grazing land (see Rehabilitation Plan attached in Section 4.3).

At the completion of extraction works on-site, AP Delaney & Co proposes to rehabilitate the entire site back to its natural state and pre-development conditions, being rural paddocks, native vegetation patches and grasslands consistent with a number of adjoining lands.

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.

Box Gum Woodland:

- To avoid, minimise and mitigate any adverse impact on retained areas of the ecological community during construction and operation
- To improve the long-term viability of retained areas of the ecological and to reduce its risk of extinction in the region
- To buffer remnant Box Gum Woodland from surrounding land use (i.e. using revegetated offsets), thereby reducing edge effects, increasing habitat complexity and providing habitat connectivity to the east.

Section 5 – Conclusion on the likelihood of significant impacts

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

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

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

No

5.1.5 Listed migratory species

No

5.1.6 Commonwealth marine environment

No

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

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

No

5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

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

The quarry expansion is not considered to be a controlled action because it is not likely to result in a significant impact to nationally-listed communities/species. An assessment was undertaken against the Significant Impact Criteria (Biosis 2018, attached).

Box Gum Woodland

It was concluded that removal of a small area of poor quality Box Gum Woodland community for the proposed quarry expansion over a long (decadal) period is unlikely to (Biosis 2018):

- Significantly reduce the quality or integrity of Box Gum Woodland in the local area or throughout the natural range of this community;
- Remove important Swift Parrot habitat although this species may occur on or near the site at times;
- Remove essential habitat for the Pink-tailed Worm-lizard which has only a low likelihood of occurring on the site.

Swift Parrot

The Swift Parrot has the potential to be an occasional visitor to the subject land during autumn and winter. The availability of resources in the broader landscape indicates that tree removal associated with the quarry expansion is not likely to result in any decline in the species' overall abundance or area of occupancy. Furthermore, the vegetation within the subject land is unlikely to constitute critical habitat for this species. This species is therefore not likely to be significantly impacted by the proposal.

Pink-tailed Worm-lizard

The Pink-tailed Worm-lizard has a low likelihood of occurring in the development area (Michael 2018) and is therefore unlikely to be significantly impacted by the proposal.

Migratory species

The proposal is unlikely to have a significant impact on any of the 14 migratory species that may

occur on the subject land. While some of these species would be expected to use the subject land on occasions, and some of them may do so regularly or may be resident, the site does not provide important habitat for an ecologically significant proportion of any of these species.

Mitigation measures have been recommended in order to minimise potential environmental and ecological impacts. Potential offsets to meet State-level obligations on E3 zoned land have been proposed to compensate for the loss of 19 trees within Box Gum Woodland at a ratio of 10:1 (DECCW 2009). These offsets will improve the condition and integrity of retained areas of Box Gum Woodland and other habitats across the subject land into the future.

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.

The person undertaking the action has been operation from the subject land for the past 45 years. During this period, the proponent has operated in accordance with all relevant approvals and development consents issued for the site. No environmental enforcement action has been taken against the person taking the action.

To date, the proponent has dutifully complied with the conditions of the existing Development Consent and EPA Licence and exemptions that apply to the quarrying activities and the disposal of waste with both annual reporting and independent audits confirming that the development has operated within its approved limits and has not caused any environmental harm.

It should be noted that the current quarry has operated for more than 45 years with little to no complaint or incident from surrounding or adjoining neighbours due to the current operations conducted on-site and the management and mitigation measures implemented by the operator (e.g. dust suppression, screen planting, notification of blasting).

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.

No proceedings under a Commonwealth or State law for the protection of the environment or the conservation and sustainable use of natural resources have been undertaken against the person making the application.

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.

AP Delaney & Co Pty Ltd is a small private company. The proposed action will be undertaken in accordance with the relevant conditions of any approvals issues for the site, as well as any conditions of relevant Environment Protection Licences issued for the current site activities.

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
ALEP 2010. Albury Local Environment Plan. Albury City Council.	This is a public planning document and is considered reliable.	Not applicable.
Biosis 2018. Biodiversity assessment for the Rockwood Quarry expansion, Table Top Project no. 27296. Letter of advice to Matt Johnson Habitat Planning 1/622 Macauley Street Albury NSW 2640, 29 May 2018	This is contemporary assessment of biodiversity values and MNES, changes were made to the design as a result of this report and its recommendations. These changes are described in information provided with the referral.	Refer to seasonal limitations documented in the assessment.
Biosis 2019. Rockwood Quarry Vegetation Management Plan. Report for Habitat Planning. Authors: Bali R. Biosis Pty Ltd, Project no. 28156.	This document provides an outline of commitments and actions to meet NSW native vegetation offset requirements under the Biocertification provisions that operate in Albury City Council.	No uncertainties are considered relevant.
DEH 2006. EPBC Act policy statement 3.5 - White box - yellow box - Blakely's red gum grassy woodlands and derived native grasslands. Department of the Environment and Heritage.	This is an Australian government document.	Not applicable
Michael, D. 2018. Survey and Habitat Assessment for the Pink-tailed Worm-lizard (<i>Aprasia parapulchella</i>) on the Rockwood Quarry Expansion. Report for Habitat Planning. Authors: Dr Damian Michael BAppSc (Hon), PhD, Principal Ecologist, Ecotone Wildlife and Habitat Assessments.	This is contemporary assessment of Pink-Tailed Worm-lizard habitat and impacts associated with the action, and has been prepared by a well-respected herpetologist with extensive experience in the Albury region.	Refer to limitations documented in the assessment.
Habitat Planning 2019. DRAFT	This is a draft document that	Any limitation associated with

Reference Source	Reliability	Uncertainties
Environmental Impact Statement Extractive Industry ('Rockwood Quarry') and Crushing of Recycled Concrete 208 Winchester Lane, Table Top. Habitat Planning. January 2019.	will be finalised after EPBC and supporting technical studies. heritage matters are resolved. The EIS has been drafted to follow NSW guidelines and draws on best-available project information and supporting technical studies.	
DECCW 2009. Proposed Biodiversity Certification for the Albury Local Environmental Plan 2009. Department of Environment, Climate Change and Water, NSW.	This is a public planning document and is considered reliable.	Not applicable.
GHD 1993. Australian Newsprint Mills Limited Delaney's quarry Hydrogeological assessment Report. May 1993. GHD Pty Ltd.	This is an old assessment but consider relevant and the best available hydrological information for the project and subject land.	Refer to limitations documented in the assessment.

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?

Based on previous investigations (bore holes) of in-situ resource materials available on-site, there is enough material within the quarry to satisfy local demand for over 50 years with in-situ granite material available to a depth of 130 metres. Given that the development only proposes to undertake quarrying works to a depth of 6 metres (as it relates to Pit 1) and up to 30 metres (as it relates to Pit 3), there are ample resources available on-site to support the proposed development.

Careful consideration has been given to the feasibility of alternative options to the carrying out of the development. It is acknowledged that in the absence of carrying out the development on the subject land, this land could be used for a number of alternative land use purposes.

Notwithstanding, following analysis of these alternative options, there are limited opportunities to redevelop the land for alternative uses given the undulating and rocky terrain of the land, which make it difficult to be used for rural, commercial or industrial purposes. Similarly, given the sites' proximity to existing heavy industries and other extractive industries, the site is also not appropriate for residential or rural residential purposes.

Accordingly, the main alternative to the proposal is to cease all quarrying operations on site and use it for broadacre farming purposes.

The implications of this are:

- hill gravel and rock will need to be sourced from elsewhere, which could encourage the opening of a new pit on a greenfields site somewhere else within the Riverina-Murray Region on a less appropriate site;
- materials for construction projects in Albury-Wodonga will need to be sourced from further afield, which will place additional demands on road infrastructure;
- competition for the provision of gravel will be reduced, which could lead to increased construction costs;
- a loss of jobs;
- the investment in the site by the current operator will not be realised, which will have an adverse economic impact on the landowner; and
- the infrastructure installed at the site will be under-utilised or will need to be removed.

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

Managing Director

9.2.2 First Name

Russell

9.2.3 Last Name

Delaney

9.2.4 E-mail

rdelaney@apdelaney.com.au

9.2.5 Postal Address

280 Kiewa Street
South Albury NSW 2640
Australia

9.2.6 ABN/ACN

ABN

22000297549 - A.P. DELANEY & CO PTY LTD

9.2.7 Organisation Telephone

0418 572 301

9.2.8 Organisation E-mail

rdelaney@apdelaney.com.au

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

Not applicable

Small Business Declaration

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

Signature:..... Date:


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

No

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

Person proposing the action - Declaration

I, RUSSELL DELANEY, 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:  Date: 25/01/2019

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

Signature:  Date: 25/01/2019

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

Managing Director

9.5.2 First Name

Russell

9.5.3 Last Name

Delaney

9.5.4 E-mail

rdelaney@apdelaney.com.au

9.5.5 Postal Address

280 Kiewa St,
South Albury NSW 2640
Australia

9.5.6 ABN/ACN

ABN

22000297549 - A.P. DELANEY & CO PTY LTD

9.5.7 Organisation Telephone

02 6021 2833

9.5.8 Organisation E-mail

rdelaney@apdelaney.com.au

Proposed designated proponent - Declaration

I, RUSSELL DELANEY, 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: 11/02/2019

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Senior Consultant Ecologist

9.8.2 First Name

Matthew

9.8.3 Last Name

Looby

9.8.4 E-mail

mlooby@biosis.com.au

9.8.5 Postal Address

PO Box 943
Wangaratta VIC 3676
Australia

9.8.6 ABN/ACN

ABN

65006175097 - BIOSIS PTY LTD

9.8.7 Organisation Telephone

0400 263 235

9.8.8 Organisation E-mail

mlooby@biosis.com.au

Referring Party - Declaration

I, MATTHEW LOOBY, 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: Matthew Looby Date: 25/1/19

Appendix A - Attachments

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

1. 28157_F1_Locality.pdf
2. 28157_F2_BoxGum.pdf
3. 28157_F3_Expansion.pdf
4. 28157_F4_VegAvoidMinimize.pdf
5. 28157_F5_ProposedOffset.pdf
6. Att 1_Copy of Previous Approvals_Albury City.pdf
7. Att 2_Neighbour Notification Letter and Responses.pdf *Duplicate -do not publish*
8. Att 2_version2_Neighbour Notification Letter and Responses.pdf
9. Att 3_27296.Rockwood.Quarry.BA_.FIN02.20180529.pdf
10. Att 4_Damian Michael Report.pdf
11. Att 5_EIS report - Delaney Quarry - Final - 2019.Part1_.pdf
12. Att 5_EIS report - Delaney Quarry - Final - 2019.Part2_.pdf
13. Att 6_Staging plan.pdf
14. Att 7_Hydrogeological Assessment and Borelogs.pdf
15. Att 8_28156.Rockwood.VMP_.DFT01.20190114.pdf
16. Att 9_Rehabilitation Plan - Rockwood.pdf