Department of Agriculture, Water and the Environment

EPBC Ref: 2021/8999

Mr Jacob Orbell General Manager Mining TEC Coal Pty Ltd Level 2, 180 Ann St BRISBANE QLD 4000

Dear Mr Orbell

Additional information required for preliminary documentation Meandu Mine King 2 East Project, QLD

I am writing to you in relation to your proposal to expand the Meandu Mine King 2 East Project and associated infrastructure.

On 6 September 2021, a delegate of the Minister decided that the proposed action is a controlled action and that it will be assessed by preliminary documentation. Further information will be required to be able to assess the relevant impacts of the proposed action.

Details outlining the further information required are at <u>Attachment A</u>. Details outlining the information requirements for offset proposals required under the EPBC Environmental Offsets Policy are at <u>Attachment B</u>.

Details on the assessment process and the responsibilities of the proponent are set out in the enclosed fact sheet. Further information is available from the department's website at http://www.environment.gov.au/epbc.

If you have any questions about the assessment process or the further information required, please contact Jena Harrap, by email to Jena.Harrap@awe.gov.au, or telephone (02) 6274 2327 and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely

Richard Miles

Director

Queensland South Assessments Section

Environmental Approvals and Sea Dumping Branch

27 September 2021

ATTACHMENT A REQUEST FOR ADDITIONAL INFORMATION REQUIRED FOR ASSESSMENT BY PRELIMINARY DOCUMENTATION

Meandu Mine King 2 East Project, QLD (EPBC 2021/8999)

It has been determined that the proposed action to expand the Meandu Mine King 2 East Project and associated infrastructure (the proposed action) is likely to have a significant impact on listed threatened species and communities (sections 18 and 18A) protected under Part 3 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

It has also been determined that the proposed action will be assessed by preliminary documentation. Preliminary documentation for the proposal will include:

- The information contained in the original referral.
- The further information you provide on the impacts of the action and the strategies you propose to avoid, mitigate and/or offset those impacts (as described below).
- Any other information specified in this request.

The preliminary documentation should be sufficient to allow the Minister (or delegate) to make an informed decision on whether or not to approve, under Part 9 of the EPBC Act, the taking of the action for the purposes of each controlling provision.

Please note that the department may require further information, in addition to the information required below, should new information come to light during the assessment stage (e.g. an additional species has been identified onsite).

The preliminary documentation must address the matters set out below:

1. General content, format and style

The preliminary documentation should be provided as one document with attachments and in a format that is objective, clear and succinct. It must contain sufficient information to avoid the need to search out previous or supplementary reports and be written so that any conclusions reached can be independently assessed.

The preliminary documentation:

1.1 Should be supported by:

- a) The best available scientific literature and robust methodologies appropriate to the purpose.
- b) Relevant maps, plans, diagrams, and technical information. Maps and diagrams must be clearly annotated, in colour and of high resolution.
- c) Details on relevant uncertainties, including whether impacts are unknown, unpredictable, or irreversible, as well as acceptability of the relevant impacts to Matters of National Environmental Significance (MNES).
- d) References or other descriptive detail in relation to the information provided, including how recent is the information.
- e) A covering summary of the information provided; and

	f) A reference table indicating where to find the information fulfilling this request.
1.2	Must demonstrate consideration of relevant Approved Listing Advice(s), Approved Conservation Advice(s), Recovery Plan(s), Threat Abatement Plan(s) or comparable policy guidelines, and approved survey methods.
1.3	Must avoid passive language and use active, clear commitments (e.g. 'must' and 'will') where appropriate.
1.4	Must be appropriately referenced using the Harvard standard. The reference list must include the address of any internet pages used as data sources.
Note:	Where relevant information was provided at the referral stage, incorporate, or refer to this information as necessary in the consolidated preliminary documentation.

2. Description of the action

The preliminary documentation must include a description of the action:

2.1	Including:
	a) The location, boundaries, and size (in hectares) of the disturbance footprint, and of adjoining areas and vegetation, which may be indirectly impacted by the proposal, including from material stockpiles, vehicle access and associated activities.
	b) A description of all components of the proposed action, including the anticipated timing and duration, (including start and completion dates) of each component of the proposed action. This should include a detailed outline of the expected timing of any staged clearing over the construction period.
	 A description of the construction and operation of the proposed action and associated works (i.e. activities that comprise its operation).
	d) A description on how the construction footprint area boundary will be defined on the ground in the referral area (e.g. by posts or fencing).
	e) A description of surrounding land uses; and
	f) A indicative layout plan for the proposed action area, including the location and type of land use, key infrastructure, open space, and environment protection areas.
2.2	Further information is required about the following:
	 a) construction of transport infrastructure and the establishment of communication network requirements (such as the purpose of these activities, what the action entails, level of impact, proposed mitigation and avoidance).
	b) specifics of the proposed fencing, including:
	o the characteristics of the fencing, i.e. height, length etc.

- whether the proposed fencing will provide a wildlife barrier to/from the proposed action area prior to clearing commencing.
- the extent of clearing of vegetation outside the proposal boundary to enable the erection of the perimeter fence, and the type of vegetation and any associated potential direct or indirect impacts to MNES.
- c) the relocation of Feeder 831 overlaps the area identified for vegetation clearing outside the proposal boundary to enable the erection of the perimeter fence. Noting the referral document states the relocation of Feeder 831 is not part of the proposed action, please provide information regarding who is responsible for the clearing and at what stage will this occur.
- d) the department notes it is a statutory requirement of the *Mineral Resources Act 1989* that TEC Coal Pty Ltd compensate relevant landowners and occupiers (including Department of Environment and Science (Parks and Forest), HQPlantations and Department of Agriculture and Fisheries. Furthermore, the department notes that the referral documentation identifies that TEC Coal Pty Ltd are responsible for the removal of the remaining vegetation following the removal of commercially viable timber. The department considers the removal of the entire Hoop Pine plantation and mixed hardwood plantation, and the prevention of future planting a facilitated impact as a result of the proposed action, potentially increasing the impact area to 185.8 ha. Please elaborate.
- e) information about potential acid sulfate soils (PASS) and/or geochemical results of spoil or coal reject material.

3. Description of the environment and Matters of National Environmental Significance

Listed threatened species and ecological communities and listed migratory species

From the information provided to date, the department considers that the matters that may or are likely to be significantly impacted by the proposed action include, but are not limited to:

• Black-breasted Button-quail (*Turnix melanogaster*) – vulnerable.

The department also considers that there is a real chance or possibility that significant impacts may arise in relation to the following:

- Koala (*Phascolarctos cinereus*) (combined populations of Queensland, New South Wales and Australian Capital Territory) vulnerable
- Spotted-tailed quoll (Dasyurus maculatus) endangered
- Northern Quoll (Dasyurus hallucatus) endangered
- Coxen's fig-parrot (Cyclopsitta diophthalma coxeni) endangered
- Cossinia (Cossinia australiana) endangered
- Squatter Pigeon (southern) (Geophaps scripta scripta) vulnerable

- Dunmali's snake (Furina dunmali) vulnerable; and
- Delma torquata/Adorned Delma (Delma torquata) vulnerable.

Note that this may not be a complete list and it is your responsibility, as the proponent, to ensure that any species or ecological communities listed under the EPBC Act at the time of the controlled action decision, which will or are likely to be significantly impacted by the proposed action, are assessed for the Minister's consideration. Any listing events (i.e. new listing or up-listing of a species or ecological community, e.g. from vulnerable to endangered category) that occur after the controlled action decision was made do not affect the approval process decision, as set out in s158A of the EPBC Act.

Furthermore, it is also the responsibility of the proponent to maintain awareness of any changes to species distributions. Please ensure that a recent Protected Matters Search Tool report has been generated and used during the assessment stage before finalising the draft preliminary documentation.

The preliminary documentation must provide a description of the environment affected by and surrounding the proposed action area, over both the short and long term.

Specific matters this section must address include, but are not limited to:

3.1	A description of any known or potential MNES (including but not limited to those listed in this request for information) that occur in the project area and adjacent areas.
3.2	A description and map of the current land use/s, land topography, surface and ground water bodies, waterways and vegetation communities (habitat types as they relate to potentially impacted listed threatened species) on the proposed action site and adjoining areas.
3.3	For listed threatened species and ecological communities that have the potential, or are likely, to be present at and in the vicinity of the project site, including but not limited to those listed in this request for further information, this section must provide the following:
	a) Information on the abundance, distribution, ecology and habitat preference of the species or communities.
	 b) Quantification of the extent of habitat and (if known) the number of individuals present or historical patterns of use on and surrounding the proposed action site (including maps identifying known or potential habitat).
	 c) Assessment of the quality and importance of known or potential habitat for the species or communities within the proposed action site and surrounding areas.
	d) Information detailing known populations or records within at least five kilometres of the development footprint and (if known) the size of these populations.

- e) Information on the survey methodology used, including a map/s of survey points or transects, how the survey points or transects were selected, when surveys were conducted (e.g. dates, time of day, weather, season, etc.) and search effort (e.g. 20 hours over eight days).
- f) The expertise of the surveyor/s relevant to the listed threatened species and ecological communities surveyed for.
- g) An assessment of the adequacy of any surveys undertaken. In particular, the extent to which these surveys were appropriate for the species and undertaken in accordance with relevant survey guidelines.
- h) Results of any surveys undertaken (including referencing any attachments with the raw results of surveys undertaken).
- Information about the methods, data and scientific literature used to identify and assess the environmental values on the proposed action site and surrounding areas, including survey data and historical records. Survey data for the proposed action site must be provided for the above listed threatened species, should be as recent as possible, and must not have been collected more than five years before the date of this letter.

If adequate surveys of the project site to confirm the presence/absence of the above listed threatened species and ecological communities and listed migratory species are not undertaken, or are not feasible to undertake, the department considers that, for the purposes of assessment under the EPBC Act, it may be appropriate to assume that those listed species and ecological communities and listed migratory species are present at the proposed site.

4. Description and quantification of impacts

Description of impacts:

Based on the information provided in the referral, additional information provided in support of the referral, information provided in the Species Profile and Threats Database, and observation records provided in the Atlas of Living Australia, the department considers that:

- The proposed action area contains approximately 17.7 ha of Black-breasted Button-quail habitat, consisting of a narrow corridor of semi-evergreen vine thicket and dry rainforest that meets the definition of habitat critical to the survival of the species as described in the Recovery Plan. In addition to the above habitat critical to the survival of the Black-breasted Button-quail, the proposed action area contains 139.5 ha of Hoop Pine plantation and 13 ha of Mixed hardwood plantation which the department considers provides potential habitat as identified within the Recovery Plan.
- The Recovery Plan for the vulnerable Turnix melanogaster (Black-breasted Buttonquail) identifies Hoop Pine Plantation within the Yarraman State forest as providing potential habitat to an important population of the species. The department

understands that as a result of the proposed action, re-planting of the pine plantation will not occur and the associated potential habitat will be lost.

- The department considers the removal of the entire Hoop Pine plantation and Mixed Hardwood plantation a facilitated impact as a result of the proposed action, potentially increasing the impact area to 185.8 ha.
- The department is therefore of the opinion that the proposed action will result in the loss of up to 185.8 ha of habitat from an important population Black-breasted Buttonquail habitat.
- The department notes that the proposed action may also result in indirect impacts on MNES and habitat adjacent to the proposed action site. The clearing of up to 185.8 ha of habitat critical to the survival of the species will displace resident Blackbreasted Button-quails, resulting in a decline in species numbers through intraspecific competition.
- The SPRAT profile for the Koala states that Koalas have also been recorded to have established home ranges within revegetated Eucalyptus-dominated woodlands and eucalypt monoculture plantations may provide potential habitat for the Koala. The department therefore considers the proposed action may result in the loss of up to 13 ha of potential Koala habitat.
- Further information regarding the presence of habitat, potential impacts and specific mitigation and management measures are required to determine whether the proposed action is likely to have a significant impact on MNES identified in section 3.
- The department notes that the action may also result in indirect impacts on MNES and habitat adjacent to the proposed action site. Direct and indirect impacts on adjacent habitat areas may also render this habitat to be functionally lost. Indirect impacts may result from:
 - o edge effects
 - isolation/fragmentation of habitat
 - mortality or injury to MNES
 - o predation and/or competition from feral animals.

The preliminary documentation must include an assessment of potential impacts that may occur as a result of all elements and project phases of the proposed action on the MNES addressed at Section 3.

Consideration of impacts must not be confined to the immediate area of the proposed action but must also consider the potential of the proposed action to impact on adjacent areas that are likely to contain populations and/or habitat for MNES.

For listed threatened species and communities the assessment of impacts must include, but not be limited to:

4.1 a) An assessment of the nature, extent and likelihood of impacts (including direct, indirect, and facilitated impacts) as a result of the proposed action. This must include the quality of the habitat impacted, a quantification of the total individuals/populations and habitat area in hectares and analysis of the

indirect impacts such as fragmentation of the habitat in the proposed action area and surrounding areas. Consideration must be given to species habitat such as hollow bearing trees, nest trees, refuge habitat, foraging and breeding habitat, sheltering or other microhabitat features relevant to the species within and surrounding the development footprint (if applicable).

- b) An assessment of the likely duration of impacts to MNES as a result of the proposed action.
- c) An assessment of whether impacts are likely to be repeated, for example as part of maintenance.
- d) Confirm areas where connectivity to surrounding habitat will be retained, removed, or functionally lost.
- e) Discussion of the risk of potential impacts as a result of the proposed action, including but not limited to the following:
 - i. Edge effects including the potential for the introduction of weed species and pathogens in the referral area and adjacent environment.
 - ii. Vehicle movement potential increase of vehicles to strike fauna in the pre-construction, construction, and operation phase of the project
 - iii. Increased presence of feral animals (e.g. dogs or feral pigs) preconstruction, construction and operation phases have the potential to increase feral animal presence within the referral area and adjacent environment.
 - iv. Earthworks potential to generate dust emissions from the removal of vegetation and movement of soil in the pre-construction and construction phase of the project.
 - v. Disturbance from increased noise, artificial light, sediment generation and other relevant stressors during construction and operation of the residential development.
- f) Details on whether any impacts are likely to be unknown, unpredictable, or irreversible.
- g) Details of any policy guidelines, relevant studies, surveys, or consultations with species experts/field specialists, which were not included in the referral or additional information provided in support of the referral.
- h) Full justification of all discussions and conclusions based on the best available information, including relevant conservation advices, recovery plans, threat abatement plans and guidance documents, should be included if applicable. Departmental documents regarding listed threatened species can be found at: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl.
- Include current maps and coordinates/shapefile of the proposed impact area and areas of habitat for MNES proposed to be retained. Maps must clearly identify development footprints, buffer zones, and any conservation/environment protection areas where impacts will be avoided,

	and areas of adjacent habitat that would be subject to indirect impacts, including areas that are to be retained within and adjacent to the site.
4.2	Provide an assessment of the direct, indirect, facilitated and cumulative impacts that may occur during construction and operational phases including local and regional scale analysis of likely impacts, with reference to the proposed action's potential contribution to cumulative impacts in the context of development patterns in the locality and region.
	*Note: Facilitated impacts may include (but are not limited to) the risk of injury or mortality to MNES as a result of the introduction of domestic dogs in a residential area, vehicle strike as a result of increased residential car use and/or the development of domestic pools.

The assessment of the impacts must take into account the precautionary principle and the principles of ecological sustainable development.

5. Avoidance and mitigation

To clarify the proposed measures to avoid and mitigate impacts, the preliminary documentation must:

5.1 Provide a consolidated description of all proposed measures to avoid and mitigate impacts, including those provided in the referral and any additional to those described in the referral.

This should include:

- a) Discussion of consideration and assessment of alternative strategies, plans and measures to avoid and mitigate impacts (e.g. alternative plans, retention of habitat/movement corridors/buffers, and fauna-friendly development and road design).
- b) Details about pre-clearance and clearance procedures to ensure that species are detected and managed to minimise mortality, stress, injury, or introduction of disease.
- c) A description (including maps and imagery) of the location, boundaries and size of buffer areas or proposed exclusion zones, and details on how these areas will be enhanced, protected and maintained. Also include a description of any fences or barriers which may be installed around areas where impacts will be avoided.
- d) Details of any rehabilitation measures to be implemented for disturbed areas, including rehabilitation objectives, target species, timing of rehabilitation stages, methodology, maintenance measures, schedules, and monitoring.
- e) Details of any ongoing mitigation and management measures during the operation of the facility.

- 5.2 For each measure proposed, indicate the:
 - a) Responsible party
 - b) Environmental outcomes to be achieved
 - c) Millstones / performance / completion criteria
 - d) An evidence-based likelihood of success
 - e) Proposed monitoring and evaluation program.
 - f) Contingency measures.
- 5.3 Provide an assessment of the predicted effectiveness of each proposed avoidance or mitigation measure, noting that the effectiveness of a particular measure is a reflection of confidence in the ability of the measure to reduce the risk of a threat. The assessment of effectiveness should be evidence based and include examples of demonstrated success of a particular measure to achieve the desired avoidance/mitigation outcome.
- Please discuss how all Policy and Guidance documents (i.e. Recovery Plans, Threat Abatement Plans and Conservation Advices) have been considered. That is, having regard to and providing a discussion on the objectives of the documents. For example, the National Recovery Plan for the Black-Breasted Button-quail states an objective to:

'Improve the status of black-breasted button-quail from its current threatened status under state and Commonwealth legislation through protection and management of habitat for extant populations (to secure survival of existing birds), increasing availability and condition of habitat (to provide opportunity for population increase) and pursuit of actions to minimise threats (to protect existing and expanding populations and prevent further loss).'

Please provide a discussion on how the proposed action is consistent with relevant species' objectives or alternatively, how the proposed avoidance, mitigation/management and offsetting will compensate for any residual significant impact, thereby ensuring consistency with the objective for relevant EPBC Act species.

6. Quantification of impacts:

A methodology that is suitable for each listed threatened species or threatened ecological community (i.e. approved by the department or supported by literature) where there is a residual significant impact must be used to assess habitat quality, noting the same scoring mechanism must be used at both impact and offset sites. Please note the department does not accept the consideration of Queensland Regional Ecosystem (RE) mapping alone to determine the presence or quality of habitat for listed threatened species.

The methodology used to provide the quality score for an area of habitat must:

 relate directly to habitat requirements of the species as aligned with the information in the SPRAT database and relevant departmental documents;

- be substantiated with appropriate field surveys in accordance with the relevant survey guidelines or using a scientifically robust and repeatable methodology; and,
- be applied per listed threatened species or threatened ecological community likely to experience a significant residual impact as a result of the proposed action.

Where there is any variation or un-substantiation of the habitat assessment approach from the information available in the SPRAT database, it should be discussed with the department prior to the submission of the assessment documentation, and must be supported by scientific evidence including published research, independent expert advice and information derived from field surveys.

A commonly accepted method by the department is to derive habitat quality scores using an adaptation of the Queensland Government's 'Guide to determining terrestrial habitat quality version 1.2 (DEHP Guide), known as the Modified Habitat Quality Assessment (MHQA). The MHQA method was developed with the intention to better reflect the requirements of the EPBC Act Environmental Offsets Policy for determining habitat quality. A copy of the DEHP Guide, a MHQA scoring guide and a MHQA scoring spreadsheet template is attached.

The department encourages all proponents to initially consult the department on appropriate methodology to calculate a habitat quality score, before conducting their assessment.

7. Proposed offsets

Based on the referral information and additional information submitted in support of the referral, the department considers that the proposed action is likely to have a residual significant impact on a minimum of 17.7 ha of Black-breasted Button Quail habitat, and up to 185.8 ha of habitat as identified in Section 6.

Where residual significant impacts remain after consideration of avoidance and mitigation measures, an environmental offset will be required to compensate for the impacts in accordance with the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy* (EPBC Offsets Policy). Offsets must be specific to the species or ecological community being impacted and must improve or maintain the viability of the species.

If a residual significant impact is identified, the preliminary documentation is required to at minimum include an offset strategy, which must:

- 6.1 Demonstrate how the offset proposal:
 - a) Meets the principles outlined in the EPBC Offsets Policy.
 - Addresses the considerations and requirements outlined in the EPBC
 Offsets Policy, including but not limited to sections 6 and 7 of the EPBC
 Offsets Policy.
 - c) Directly contributes to the ongoing viability of the EPBC listed species or ecological community and will deliver an overall conservation outcome that improves or maintains the viability of the protected matter, as compared to what is likely to have occurred under the status quo, i.e. if neither the action nor the offset had taken place.

	 d) Compensates for the impact over the entire duration of the impact (i.e. should impacts be in perpetuity, the offsets must also be delivered in perpetuity).
	Note: while the offsets do not need to be secured before the decision on whether to approve the proposed action, should the proposed action be approved, conditions of an approval are likely to require that offsets are secured, and management measures are in place, before commencement of the proposed action.
6.2	For further details regarding offset requirements, see Attachment B.

Offset Site habitat quality assessment methodology

The department notes that the same methodology must be used for assessing both impact and offset site habitat quality. As described in section 4, the department commonly accepts an adaptation of the DEHP Guide, the MHQA.

In accordance with the EPBC Environment Offsets Policy, there are three components that need to be considered when calculating habitat quality: site condition, site context, and species stocking rate.

When calculating offsets, please refer to the department's published guidance: <u>How to use</u> the Offsets Assessment Guide. If it is useful, the department has prepared an annotated version of the Offsets Assessment Guide to help guide you through that calculation process (see attached).

Please note: all final calculations will be performed through the <u>Offsets Assessment Guide</u> on the department's website, rather than the annotated version.

The department encourages all proponents to initially consult the department on appropriate methodology to calculate a habitat quality score, before conducting their assessment.

7. Economic and social matters

The preliminary documentation must address the economic and social impacts (both positive and negative) of the proposed action. This may include:

7.1	Provide details on the social and economic costs and/or benefits of undertaking the proposed action, including the basis for any estimations of costs and/or benefits. Where possible, please include the total economic capital investment and economic ongoing value of the project.
7.2	Identify if economic benefits and employment opportunities are in addition to what would have been expected if the action were not to take place.
7.3	Provide details of any public stakeholder consultation activities, including the outcomes of those consultations.
7.4	Provide details of any consultation with Indigenous stakeholders.

8. Ecologically sustainable development

The preliminary documentation must:

8.1	Provide a description of how the proposed action meets the principles of ecologically sustainable development, as defined in section 3A of the EPBC Act.
8.2	Environmental Record of person(s) proposing to take the action.
	The information provided must include details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:
	a) the person proposing to take the action; andb) for an action for which a person has applied for a permit, the person making the application.
	If the person proposing to take the action is a corporation, details of the corporation's environmental policy and planning framework must also be included.
8.3	Other approvals and conditions
	If applicable, the preliminary documentation should include information on any other requirements for approval or conditions that apply, or that the proponent reasonably believes are likely to apply, to the proposed action. This must include:
	 a) a description of any approval that has been obtained or is required to be obtained from a State, Territory or Commonwealth agency or authority (other than an approval under the EPBC Act), including any conditions that apply (or are reasonably expected to apply) to the action; and b) a description of the monitoring, enforcement and review procedures that apply, or are proposed to apply, to the action.

ATTACHMENT B INFORMATION REQUIREMENTS FOR EPBC ACT OFFSET PROPOSALS

The offset proposal must include, but not be limited to, the following:

Details in relation to the proposed offset package, including:

- a) A description of the proposed offset site(s) including location, size, condition, and relevant ecological/species habitat features, landscape context and cadastre boundaries of the offset site(s) (supported by mapping).
- b) Evidence of the presence of, or usage by, relevant protected matter(s) on, or adjacent to the proposed offset site(s), and the presence and quality of habitat for protected matter(s) on the proposed offset site.
- c) Current and likely future tenure of the proposed offset site and details of how the offset site will be legally secured for the full duration of the impact.

Details and justification demonstrating how the proposed offset package will maintain or improve the viability of the protected matter(s) consistent with the EPBC Environmental Offsets Policy and *EPBC Act Offsets Assessment Guide*. This includes:

- a) Offset completion criteria (i.e. environmental outcomes) to be achieved, and reasoning for these in reference to relevant statutory recovery plans, conservation advices, and threat abatement plans (e.g. within 15 years of commencement of the action, 85 per cent of the offset site contains X number of Koala habitat trees).
- b) Milestones to demonstrate adequate progress towards achieving the offset completion criteria (e.g. within 10 years of commencement of the action the proponent must increase, by at least 20 per cent, the number of available Koala food trees at the offset site).
- c) Specific environmental management activities and mitigation that will attain and maintain the completion criteria, including the management of threats to relevant species and the timing of actions (e.g. complete the planting, and ensure a survival rate of 90 per cent, of at least 15, 000 seed, sapling, or tube stock (or equivalent) Koala food tree species within five years following commencement of the action; reduce the invasive weed coverage on the offset site to 5 per cent within five years following commencement of the action implement an annual non-native feral pest control program over a 10 year period).
- d) Baseline survey information to determine the presence of relevant protected matters and the extent and quality of the respective habitat(s) at the proposed offset site(s) in accordance with the relevant survey guidelines or using a scientifically robust and repeatable methodology.
- e) A monitoring and corrective action program to measure the success of the environmental outcomes, which must include performance indicators, milestone outcomes, monitoring requirements, trigger values, corrective measures, and identified roles and responsibilities in accordance with the requirements in section 3 of the department's Environmental Management Plan Guidelines:

https://www.environment.gov.au/epbc/publications/environmental-management-plan%ADquidelines

- Evidence of how the proposed offset completion criteria for the offset will be maintained over the duration of the offset.
- g) Justification of how the offset package meets the *EPBC Act Offsets Assessment Guide*, in particular:
 - Evidence of the likely effectiveness of any proposed management actions (i.e. rehabilitation / restoration / re-creation of habitat) to support quality improvement and/or maintenance of the proposed offset site(s) for the relevant protected matter(s).
 - The time over which management actions will deliver the proposed improvement or maintenance of habitat quality for the relevant protected matter(s).
 - The risk of damage, degradation or destruction to any proposed offset site(s), in the absence of any formal protection and/or management, over a foreseeable time period (20 years). This information is important in determining the comparative benefit of a proposed offset.
 - Evidence to support 'confidence in results' for averted loss and quality scores.

Note: where increases in habitat quality of the offset site are being proposed by the proponent to meet the direct offset requirements, the department will require specific details of site condition, site context or stocking rate measures to be implemented commensurate to the expected level of habitat improvement.