

The United Wambo Open Cut Coal Mine Project (the Project) was declared to be a 'controlled action' under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), given its likely significant impacts on listed threatened species and communities and water resources. In making this determination, the delegate for the Commonwealth Minister for the Environment accredited the State's environmental assessment processes under the *Environmental Planning and Assessment Act 1979* (EP&A) Act. Consequently, the potential impacts on controlling provisions under the EPBC Act have been assessed under Part 4 of the EP&A Act.

In accordance with the bilateral agreement made under section 45 of the EPBC Act between the Commonwealth and NSW Governments, the Commonwealth has accredited the State's assessment process for this Project. The Department provides the following additional information for the Commonwealth Minister to take into account when deciding whether or not to approve the proposal under the EPBC Act.

The Department's assessment has been prepared following careful consideration of the information contained in Sections 6.8 and 6.9, Section 7 and Appendices 11 and 12 of the Applicant's Environmental Impact Statement (EIS) for the Project; the Applicant's Response to Submissions (RTS); the Applicant's Response to the Commission's Review; supplementary information provided by the Applicant during the assessment process; and submissions and advice provided by the NSW Office of Environment and Heritage (OEH), NSW Department of Primary Industries – Water (now NSW Department of Industry – Lands and Water (DoI – L&W)), the Commonwealth Department of the Environment and Energy (DoEE), and the Commonwealth's Independent Expert Scientific Committee on Coal Seam Gas and Large Mining Development (IESC).

This assessment is supplementary to, and should be read in conjunction with, the assessments included in Sections 6.4 and 6.6 of the Department's Preliminary Assessment Report (PAR) and the assessment contained within **Sections 2.3** and **2.5** of this report. Accordingly, the Commonwealth Minister should also have close regard to those sections of these two reports.

E.1 IMPACTS TO LISTED THREATENED SPECIES AND COMMUNITIES

The Project would involve disturbance of 146 ha of previously cleared land and non-native vegetation and 527 ha of remnant and regenerating native vegetation communities. Of the native vegetation communities to be cleared under the Project, approximately 247 ha conforms to the definition of the *Central Hunter Valley Eucalypt Forest and Woodland* (CHVEFW) critically endangered ecological community (CEEC), as listed under the EPBC Act. Some areas of native vegetation proposed to be cleared also provide (or have the potential to provide) habitat and foraging resources for three listed threatened fauna species, including the Regent Honeyeater, Swift Parrot and Spotted-tailed Quoll. A summary of the likely impacts on the CEEC and threatened species listed under the EPBC Act is provided in **Table E1**.

The Department notes that both OEH and DoEE have attended site visits to inspect the CHVEFW and OEH has reviewed GIS files to confirm the extent of the mapped CEEC.

Table E1 | Summary of likely impacts on CEECs and threatened species listed under the EPBC Act

MNES	EPBC Act Status	Impact Area (ha)	Nature of Impact
Central Hunter Valley Eucalypt Forest and Woodland CEEC	CEEC	246.8	Direct clearing of vegetation community
Regent Honeyeater (Anthochaera phrygia)	Endangered	203.7	Clearing of potential habitat
Swift Parrot (Lathamus discolour)	Endangered	29.7*	Clearing of potential habitat
Spotted-tailed Quoll (Dasyurus maculatus maculatus)	Endangered	352.9	Clearing of potential habitat

^{*} At the time of the EPBC Act controlled action decision, DoEE considered that the impact area for the Swift Parrot should be the same as the Regent Honeyeater because the flowering seasons of three of the four main eucalypt species on the site include the winter months when Swift Parrots may be present in the district. Eucalyptus crebra (narrow-leaved ironbark) flowers between May and January, Corymbia maculata (syn., Eucalyptus maculata) (spotted gum) flowers between May and September and Eucalyptus moluccana (grey box) flowers between February and August. These species provide important foraging habitat for the Swift Parrot. The Applicant has taken a narrower interpretation of Swift Parrot habitat. The Department recognises this discrepancy but notes that it would not result in changes to the biodiversity offset strategy because the Applicant is required to provide the same number of offset hectares for the Regent Honeyeater.

The Applicant's biodiversity assessment reports¹ identify that the Project would clear potential and/or known habitat for threatened species which could, in the absence of appropriate management measures, result in significant impacts. However, the Applicant has asserted that its proposed mitigation, management and offsetting measures would ensure that the Project does not cause significant impacts to any CEECs or threatened species.

E.2 IMPACTS TO WATER RESOURCES

DoEE has identified the impacts of the Project on water resources (in relation to large coal mining development) as a controlling provision under the EPBC Act. A detailed assessment of the potential impacts of the Project on water resources is contained in Section 6.6 of the Department's PAR. This assessment considered the advice of the IESC and DoI – L&W on surface water and groundwater impacts, including potential impacts on downstream watercourses, water users, groundwater dependent ecosystems (GDEs) and receiving environments. Further assessment of the potential impacts on water resources is contained in **Section 2.5** of this report.

Based on these assessments, the Department is satisfied that the Project can be undertaken:

- using the existing surface water and groundwater models, which are considered appropriate and fit for purpose, and future revisions and updates of these models;
- without causing significantly greater impacts than are already approved regarding depressurisation, drawdown, stream leakage, stream flows, GDEs and other vegetation, fauna (including aquatic biota) and flooding; and
- without causing significant additional impacts to significant water resources (ie Wollombi Brook, Hunter River and their associated alluvium).

The Department is satisfied that there would be no significant impacts on water resources resulting from the Project, above and beyond those already approved for the existing United Colliery and Wambo Coal Mine. The proposed action is unlikely to have significant impacts on groundwater and surface water near the Project and any

¹ Including the *Biodiversity Assessment Report* provided in Appendix 4, Part B of the Applicant's *Response to Submission Report* (Umwelt, May 2017) and the *Addendum Report for Additional Offset Sites* provided in Appendix 9 of the Applicant's *Response to Independent Planning Commission Recommendations* (Umwelt, July 2018), as amended by the additional information response dated 11 October 2018.

impacts are able to be appropriately licensed, monitored and managed. To ensure this is the case, the Department has recommended conditions requiring:

- the preparation and implementation of a Water Management Plan, including a program to monitor groundwater levels and surface and groundwater quality;
- the provision of compensatory water supplies for any affected groundwater user;
- compliance with water management performance measures; and
- the implementation of suitable mitigation, management, monitoring and response measures to manage impacts on water resources.

E.3 DEMONSTRATION OF 'AVOID, MITIGATE, OFFSET' FOR MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE (MNES)

The EIS and RTS (Appendix 4 of Part B) describe a number of measures and refinements that have been made to the conceptual mine plans to reduce disturbance of threatened flora species, ecological communities and fauna habitat, to avoid direct impacts on fauna species and to increase the buffer distances between mining areas and nearby creek lines, thereby reducing potential direct and indirect impacts on water resources.

For impacts within or close to the Project's disturbance boundary, where avoidance is not practicable, the Applicant has proposed a range of targeted mitigation measures, including undertaking pre-clearance surveys, landform establishment, habitat augmentation and enhancement and management of bushfires and domestic stock. Where the Project is considered likely to have indirect impacts on MNES (ie from noise, light, dust, erosion, weeds and feral animals), the Applicant has also proposed to undertake a number of mitigation or management actions that would reduce the extent of these impacts.

To account for any residual impacts that cannot be addressed through the proposed avoidance and mitigation measures, the Applicant has provided a comprehensive and targeted biodiversity offset strategy. This includes securing the offsets in three stages, each linked with the progress of mining operations and progressive disturbance of native vegetation.

OEH and the Department are satisfied that the proposed biodiversity offset strategy satisfies offsetting requirements for the key MNES, including the CHVEFW CEEC, Swift Parrot, Regent Honeyeater and Spotted-tailed QuoII (see **Table E2**). As required by DoEE, all credits required for MNES during Stage 1 have been secured through land-based offsets.

Table E2 | Summary of Impact and Offset Areas for MNES

MNES	Impact Area (ha)	Offset Area (ha)	Offset Ratio
Central Hunter Valley Eucalypt Forest and Woodland CEEC	246.8 (known habitat)	1,135.6*	4.6:1
Regent Honeyeater (Anthochaera phrygia)	203.7 (potential habitat)	1,407.3	6.9:1
Swift Parrot (<i>Lathamus discolour</i>)	29.7 (potential habitat)	473.9	16:1
Spotted-tailed Quoll (Dasyurus maculatus maculatus)	352.9 (potential habitat)	1,507.3	4.3:1

^{*}includes 505.8 ha of mine rehabilitation

Further detailed consideration and assessment of the likely impacts for individual fauna species and the adequacy of the proposed offsets package is provided in Section 6.4.3 of the PAR and **Section 2.3** of this report.

E.4 REQUIREMENTS FOR DECISIONS ABOUT THREATENED SPECIES AND ENDANGERED ECOLOGICAL COMMUNITIES

In accordance with section 139 of the EPBC Act, in deciding whether or not to approve, for the purposes of a subsection of either section 18 or section 18A of the EPBC Act, the taking of an action and what conditions to attach to such an approval, the Commonwealth Minister must not act inconsistently with certain international environmental obligations, Recovery Plans, or Threat Abatement Plans. The Commonwealth Minister must also have regard to relevant approved Conservation Advice.

E.4.1 Australia's International Obligations

Australia's obligations under the *Convention on Biological Diversity* (Biodiversity Convention) include the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.

The recommendations of this report are not inconsistent with the Biodiversity Convention, which promotes environmental impact assessment (such as this process) to avoid and minimise adverse impacts on biological diversity. Accordingly, the recommended conditions require avoidance, mitigation and management measures for listed threatened species and communities and all information related to the proposed action is required to be publicly available to ensure equitable sharing of information and improved knowledge relating to biodiversity.

Australia's obligations under the Convention on Conservation of Nature in the South Pacific (Apia Convention) include encouraging the creation of protected areas which together with existing protected areas will safeguard representative samples of the natural ecosystems occurring therein (particular attention being given to endangered species), as well as superlative scenery, striking geological formations and regions. Additional obligations include using best endeavours to protect fauna and flora (special attention being given to migratory species) so as to safeguard them from unwise exploitation and other threats that may lead to their extinction. The Apia Convention was suspended on 13 September 2006. Nonetheless, Australia's obligations under the Convention have been taken into consideration. The recommended approvals are not inconsistent with the Convention which generally aims to promote the conservation of biodiversity.

The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) is an international agreement between governments which seeks to ensure that international trade in specimens of wild animals and plants does not threaten their survival. The recommended approvals are not inconsistent with CITES as the proposed action does not involve international trade in specimens of wild animals and plants.

E.4.2 Recovery Plans and Approved Conservation Advices

The Department's PAR and this report together provide a detailed and comprehensive assessment of the potential impacts of the Project on listed threatened species and communities under the NSW *Biodiversity Conservation Act 2016* (BC Act) and the EPBC Act. In accordance with the bilateral assessment process, the Department has taken into consideration approved Conservation Advice and Recovery Plans of the species and communities which have been identified as having potential to be impacted by the Project.

The primary risk of impact to species and communities from the Project is land clearing leading to the removal of habitat and foraging resources. The Department notes that, in addition to the avoidance and mitigation measures

proposed by the Applicant, any residual impacts would be offset under the Applicant's Stage 1 Biodiversity Offset Strategy, which OEH has assessed and considers to be acceptable.

The Department has also included requirements in its recommended conditions of consent aimed at improving the presence of foraging and habitat resources within offset and rehabilitation areas.

Accordingly, the Project would not result in residual impacts to biodiversity, subject to the timely and successful implementation of the Applicant's proposed offset strategy, which would ensure habitat and foraging resources are established and/or conserved for listed threatened species. In relation to specific approved Conservation Advice and Recovery Plans that are applicable under the EPBC Act, the following assessment has been made.

Approved Conservation Advice for the CHVEFW CEEC

In April 2015, the Commonwealth Minister approved the Conservation Advice for the CHVEFW CEEC. This Conservation Advice identifies vegetation clearance and landscape fragmentation as a key threat affecting this CEEC. Other key threats include invasive flora species, pests, infrastructure development and removal of fallen timber and trees.

The Conservation Advice identifies and prioritises conservation actions that could be implemented to assist the recovery of the CEEC. There is no Recovery Plan in place for this community.

The Project would result in the clearing of approximately 247 ha of vegetation which conforms to CHVEFW. To compensate for this loss, the Stage 1 Biodiversity Offset Strategy has focused on securing 630 ha of existing high-quality areas of CHVEFW across three BioBank Sites (now 'Stewardship Sites' under the BC Act) and providing conservation gain through restoring 506 ha of previously cleared areas and mine spoil to CEEC. This represents a total offset of 1,136 ha of suitable potential habitat for the CEEC in the Hunter Valley for an impact of 247 ha (4.6:1 offset ratio).

Additionally, the Applicant has confirmed that further offsets are currently being investigated to offset the CHVEFW for later stages of the Project that would add approximately 314 ha of CEEC to the offset package.

The Department and OEH are satisfied that the proposed offset package for CHVEFW is adequate and would be in accordance with the Conservation Advice, particularly considering it would result in the long-term conservation of a significant area of the community in the Hunter Valley.

National Recovery Plan and Approved Conservation Advice for the Regent Honeyeater (Anthochaera phrygia)

The National Recovery Plan considers the conservation requirements of the Regent Honeyeater across its known range and identifies actions to ensure its long-term viability. The Recovery Plan provides information on habitat requirements, ecology, distribution, conservation status, key threats, management issues, research and monitoring, captive breeding and translocation, and community education. The Hunter Valley is identified in the Recovery Plan as a known breeding area for the Regent Honeyeater, where the species is regularly recorded.

The Conservation Advice for the Regent Honeyeater was approved by the Commonwealth Minister on 25 June 2015 and identifies the main threat as disease. The Conservation Advice identifies local and regional priority actions that could be implemented to support recovery of the species.

The objectives of both documents are to:

- reverse the long-term population trend of decline and increase the numbers of Regent Honeyeaters to a level where there is a viable, wild breeding population, even in poor breeding years; and
- maintain key Regent Honeyeater habitat in a condition that maximises survival and reproductive success, and provides refugee during periods of extreme environmental fluctuation.

The Regent Honeyeater was not recorded in the development footprint for the Project, but potential habitat was identified. The Project would result in the clearing of approximately 204 ha of vegetation which is considered potential foraging habitat for the Regent Honeyeater. To address these potential impacts, the Stage 1 Biodiversity Offset Strategy includes direct land-based offsets containing suitable Regent Honeyeater foraging habitat that occurs within the Hunter Region. Umwelt (May 2018) indicates that the restoration of White Box Grey Box - Red Gum - Rough-barked Apple Grassy Woodland on rich soils on hills in the upper Hunter Valley in existing grassland areas of the Highfields BioBank Site represents a gain of around 347 ha of vegetation dominated by key feed trees, which would improve the viability of the species in the Hunter Valley. Further, the 1,060 ha of existing suitable foraging habitat at the BioBank Sites would be maintained and conserved in the long-term as areas of high-quality habitat. This represents a total offset of 1,407 ha of suitable potential habitat for the Regent Honeyeater in the Hunter Valley for an impact of 204 ha of potential foraging habitat (6.9:1 offset ratio).

The Department considers that the offsets package is consistent with the primary conservation objectives of reversing the long-term trend of population decline and maintaining key habitat to maximise survival and reproductive success. The Department therefore considers that the proposal would not be inconsistent with the approved Conservation Advice or Recovery Plan for the Regent Honeyeater, subject to the timely and successful implementation of Applicant's biodiversity offset strategy.

National Recovery Plan and Approved Conservation Advice for the Swift Parrot (Lathamus discolor)

The National Recovery Plan considers the conservation requirements of the Swift Parrot across its known range and identifies actions to ensure its long-term viability. The Recovery Plan provides information on habitat requirements, ecology, distribution, conservation status, key threats, management issues, research and monitoring, captive breeding and translocation, and community education. The Hunter Valley is identified in the Recovery Plan as a winter foraging area for the Swift Parrot where the species is regularly recorded.

The Conservation Advice for the Swift Parrot was approved by the Commonwealth Minister on 5 May 2016 and identifies the main threats as predation from Sugar Gliders and loss/alteration of its habitat. The Conservation Advice identifies local and regional priority actions that could be implemented to support the recovery of the species.

The objectives of both documents are to:

- to prevent further decline of the Swift Parrot population; and
- to achieve a demonstrable sustained improvement in the quality and quantity of Swift Parrot habitat to increase carrying capacity.

The Swift Parrot was not recorded in the development footprint for the Project, but potential habitat was identified. The Project would result in the clearing of approximately 30 ha of vegetation which is considered potential foraging habitat for the Swift Parrot. To address these potential impacts, the Applicant's Stage 1 Biodiversity Offset Strategy includes direct land-based offsets containing suitable Swift Parrot foraging habitat that occurs within the Hunter Region. Umwelt (May 2018) indicates that the restoration of grasslands at the BioBank Sites represents a gain of around 133 ha of vegetation dominated by key feed trees, which would improve the viability of the species in the Hunter Valley. Further, 341 ha of existing suitable foraging habitat at the BioBank Sites would be maintained and conserved in the long-term as areas of high-quality habitat. This represents a total offset of 474 ha of suitable potential habitat for the species in the Hunter Valley for an impact of 30 ha (16:1 offset ratio).

The Department considers that the offsets package is consistent with the primary conservation objectives of preventing further population decline and improvement in quality and quantity of habitat to maximise survival and reproductive success. The Department therefore considers that the proposal would not be inconsistent with the

approved Conservation Advice and Recovery Plan for the Swift Parrot, subject to the timely and successful implementation of Applicant's biodiversity offset strategy.

National Recovery Plan and Approved Conservation Advice for the Spotted-tailed Quoll (Dasyurus maculatus maculatus)

The National Recovery Plan considers the conservation requirements of the Spotted-tailed Quoll across its known range and identifies actions to ensure its long-term viability. The Recovery Plan provides information on habitat requirements, ecology, distribution, conservation status, key threats, management issues, research and monitoring, captive breeding and translocation, and community education.

The Conservation Advice for the Spotted-tailed Quoll was approved by the Commonwealth Minister on 3 December 2015. The Advice identifies that major threats to the Spotted-tailed Quoll are habitat loss, modification and fragmentation; timber harvesting; poison baiting; competition and predation from introduced carnivores; deliberate killing; road mortality; bushfire and prescribed burning, poisoning by Cane Toads; and climate change. The Conservation Advice identifies local and regional priority actions that could be implemented to support the recovery of the species.

The objectives of both documents are to:

- reduce the rate of decline of the Spotted-tailed QuoII; and
- ensure that viable populations remain throughout its current range in eastern Australia.

The Project would result in the clearing of approximately 353 ha of vegetation which is considered potential foraging and denning habitat for the Spotted-tailed Quoll. To address these potential impacts, the Stage 1 Biodiversity Offset Strategy includes direct land-based offsets containing suitable Spotted-tailed Quoll foraging and denning habitat that occurs within the Hunter Region. Umwelt (May, 2018) indicates that the restoration of grasslands at the BioBank Sites represents a gain of around 345 ha of suitable foraging and denning habitat, which would improve the viability of the species in the Hunter Valley. Further, 1,162 ha of existing suitable foraging habitat at the BioBank Sites would be maintained and conserved in the long-term as areas of high-quality habitat. This represents a total offset of 1,507 ha of suitable habitat for the species in the Hunter Valley for an impact of 353 ha (4.3:1 offset ratio).

The Department considers that the offsets package is consistent with the primary conservation objectives of reducing the rate of further population decline and ensuring that viable populations remain in eastern Australia. The Department therefore considers that the proposal would not be inconsistent with the approved Conservation Advice or Recovery Plan for the Spotted-tailed Quoll, subject to the timely and successful implementation of the Applicant's biodiversity offset strategy.

E.4.2 Threat Abatement Plans (TAPs)

The Department has considered the approved Threat Abatement Plans (TAPs) under the EPBC Act, available at http://www.environment.gov.au/biodiversity/threatened/threat-abatement-plans/approved, along with any current draft revisions to these plans. The relevant TAPs are set out below.

Threat abatement plans for competition and land degradation by rabbits (relevant to Regent Honeyeater), predation by the European Red Fox (relevant to Spotted-tailed Quoll) and predation by feral cats (relevant to Spotted-tailed Quoll and Swift Parrot)

Rabbits have direct impacts on native flora and fauna, including from grazing on native vegetation, preventing regeneration and competing with native fauna for habitat and food. Rabbits can also have indirect and secondary effects on the predation of native fauna, for instance by supporting populations of introduced predators or by

denuding vegetation and thereby exposing fauna species to increased predation. The ecology of rabbits, including digging and browsing habits, leads to a loss of vegetation cover and consequent slope instability and soil erosion, which further degrades fauna habitat.

The European red fox and feral cats are significant predators in Australia that interact with native fauna in various ways, including predation, competition for resources and transmission of disease.

In relation to the threat abatement plans for competition and land degradation by rabbits and predation by the European Red Fox and feral cats, it is possible that the proposed action may:

- facilitate the spread, or lead to a higher abundance of foxes and feral cats (and other unmanaged or feral fauna) through the clearance and modification of habitat; and
- increase the amount of disturbed and modified habitats, which rabbits tend to colonise, and lead to an increase in rabbit populations.

The Department has included measures for the control of feral animals under the recommended Biodiversity Management Plan for the Project, including specific requirements for the Applicant to consider the actions identified in relevant TAPs. With these measures in place, the Department is satisfied that approval of the action would not be inconsistent with the TAPs for competition and land degradation by rabbits and for predation by the European Red Fox and feral cats.

E.5 ADDITIONAL EPBC ACT CONSIDERATIONS

In addition to the key matters discussed above, **Table E3** contains a range of further mandatory considerations, factors to be taken into account and factors to have regard to under the EPBC Act.

Table E3 | Additional Considerations for the Commonwealth Minister under the EPBC Act

EPBC Act	Consideration	Conclusion		
section				
Mandato	ry considerations			
136(1)(b)	Social and economic matters are discussed in the EIS and Sections 6.8 and 6.9 of the PAR.	The Department considers that the proposed development would result in a range of benefits for the local and regional economies and would allow for the continued and valuable production of coal from the region.		

Factors to be taken into account

Principles of ecologically sustainable development (ESD), including the precautionary principle, have been taken into account, in particular in:

136(2)(a)

- long and short-term economic, environmental, social and equity considerations relevant to this decision:
- conditions that restrict environmental impacts, impose monitoring and adaptive management requirements and reduce uncertainty concerning the potential impacts of the Project;

The Department considers that, subject to the recommended conditions of consent, the Project could be undertaken in a manner that is consistent with the principles of ESD.

- conditions requiring the Project to be operated in a sustainable way that protects the environment for future generations and conserves MNES;
- advice provided within this report which reflects the importance of conserving biological diversity and ecological integrity in relation to the controlling provisions for this Project; and
- mitigation measures to be implemented which reflect improved valuation, pricing and incentive mechanisms that promote a financial cost to the applicant to mitigate the environmental impacts of the Project.

136(2)(e)

Other information on the relevant impacts of the action.

The Department is not aware of any relevant information not addressed in the PAR or this report. The Department considers that all information relevant to the impacts of the Project has been taken into account.

136(2)(fa)

Advice was sought from the IESC and its comments have been considered and addressed in detail in Section 6.6.3 of the PAR and in Section 2.5 of this report.

The Department considers that its assessment and recommendations have taken the IESC's advice on the Project into account.

Factors to have regard to

176(5)

Bioregional plans

The Commonwealth Government released its bioregional assessment package for the Northern Sydney Basin - Hunter Subregion in May 2018. The Department notes that the bioregional assessment includes predictions of drawdown covering the United Wambo Project area.

The bioregional assessments are undertaken at a regional scale and the results are used to inform more detailed local scale assessment, using finer scale modelling and local data. This local scale assessment has already been undertaken for the Project and should therefore continue to be relied on over the larger-scale bioregional assessment.

Considerations on deciding conditions

Must consider:

134(4)

- information provided by the person proposing to undertake the action or by the designated applicant of the action; and
- desirability of ensuring as far as practicable that the condition is a cost- effective means for the

Documentation provided by the Applicant is provided at Appendix A and Appendix C of the PAR and **Appendix A** of this report. These documents are available on the Department's website

http://majorprojects.planning.nsw.gov.au/

The Department considers that the recommended conditions of consent (see

Commonwealth and the person taking the action to achieve the object of the condition.

Appendix F) are practicable and cost-effective means to achieve their purposes.

The conditions have been prepared following careful consideration of material provided by the Applicant and following consultation with DoEE.

E.6 CONCLUSIONS ON CONTROLLING PROVISIONS

E.6.1 Threatened Species and Communities (sections 18 and 18A of the EPBC Act)

The information provided to date identifies that the Project could have the potential to result in significant impacts on threatened species and communities listed under the EPBC Act (namely CHVEFW, Regent Honeyeater, Swift Parrot and Spotted-tailed QuoII). For the reasons set out above and in Section 6 of the PAR, the Department considers that the impacts of the proposed action on threatened species and communities would be acceptable, subject to the avoidance, mitigation, offsetting and management measures described in the Applicant's environmental assessment documents, and the requirements of the Department's recommended conditions of consent (see **Appendix F**).

The Applicant has identified suitable land-based offsets (Biobank Sites) with sufficient like-for-like offsets to address a majority of the first stage of development (Stage 1), including impacts to threatened species and communities listed under the EPBC Act (see Section 2.3.3 of this report). The remaining offset requirements for Stages 2 and 3 would need to be satisfied prior to commencement of any disturbance associated with these stages.

The Department has recommended conditions relating to the Applicant's obligation to minimise harm to the environment (condition A1) and to address potential impacts on biodiversity and threatened species (conditions B50 to B60). These conditions include requiring the Applicant to retire the associated ecosystem credits (calculated under the *NSW Framework for Biodiversity Assessment* and associated BioBanking Assessment Methodology) in accordance with the Biodiversity Offsets Scheme of the BC Act. Acknowledging that DoEE has not endorsed all mechanisms within this scheme, the Department has included a note clarifying that the relevant CEEC credits can only be discharged through payment into the NSW Biodiversity Conservation Fund if this fund has been endorsed by the Commonwealth Minister responsible for administering the EPBC Act.

The Department has also recommended a condition requiring the Applicant to prepare a detailed Biodiversity Management Plan. This plan would further describe the biodiversity offset strategy and describe the measures to be implemented to avoid and minimise impacts to threatened species and communities, including enhancing/regenerating native vegetation and habitat features and controlling feral pests in accordance with the relevant TAPs.

The Department has also recommended conditions to facilitate successful regeneration of CHVEFW CEEC through mine site rehabilitation. This includes a specific rehabilitation objective for ecological mine rehabilitation (conditions B85) and a requirement to progressively review its regeneration progress (condition B90).

The Department recommends that the Commonwealth Minister require the Applicant to implement the State's conditions, where they relate to the management of impacts on threatened species and communities listed under the EPBC Act.

E.6.2 Water Resources, in relation to Large Coal Mining Development (sections 24D and 24E of the EPBC Act)

The proposed Project was jointly referred by the Department and DoEE to the IESC for advice on surface water and groundwater impacts, including potential impacts on downstream watercourses, water users, GDEs and receiving environments. The advice provided by the IESC is summarised in Section 6.6.3 of the PAR.

The IESC's advice was considered by the Department and informed its recommendation that the impacts of the proposed action on water resources would be acceptable, subject to the avoidance, mitigation and management measures described in the Applicant's EIS, RTS and response to the Commission's Review Report, this report and the requirements of the Department's recommended conditions of consent (see **Appendix F**).

E.7 OTHER PROTECTED MATTERS

DoEE has determined that other matters under the EPBC Act are not controlling provisions with respect to the proposed action. These include listed World Heritage places, National Heritage places, Ramsar wetlands, the Commonwealth marine environment, Commonwealth land, Commonwealth actions, nuclear actions, the Great Barrier Reef Marine Park and Commonwealth Heritage places located overseas.

E.7 CONCLUSIONS

The Department is satisfied that the recommended conditions would provide suitable protection for MNES under the EPBC Act. The Department notes that, if approved by the Commission, the proposal would be referred to the Commonwealth Minister for the Environment for determination under the EPBC Act.