



**Environment,
Climate Change
& Water**



Your reference:
Our reference: LIC06/434-05:DOC10/48299:PW
Contact: Peter Bloem, (02) 4224 4100

Manager Mining Projects
Major Projects Assessment
Mining and Industry Projects
(Attention: Mr Howard Reed)
GPO Box 39
SYDNEY NSW 2001



Dear Sir

**MAJOR PROJECT APPLICATION
NRE NO 1 COLLIERY – PRELIMINARY WORKS (10_0046)**

I am writing in response to the exhibited Major Project Application, Environmental Assessment (EA) and accompanying information for the proposed NRE No 1 Colliery – Preliminary Works (10_0046) received by the Department of Environment, Climate Change and Water (DECCW) on 26 October 2010.

The EA states that many of the proposed project elements for the extraction of remanet Bulli coal reserves already have approval under the Mining Act 1992 and its associated regulations, with the most recent being a Subsidence Management Plan (SMP) Approval for the V Mains issued in August 2010. In addition, the Project also includes a number of first workings for mining in the Wongawilli seam.

DECCW recommends that the same environmental performance criteria that has been applied to the V Mains SMP should also be applied to the mining elements associated with the Stage 1 Project. The outcomes of the BHP Bulli Seam Approval process and supporting Planning Advisory Commission (PAC) report should be taken into account in any future Stage 2 Project.

DECCW has undertaken a review of the EA and has attached comments, including recommended Statement of Commitments (SOC's) and/or Approval Conditions for Department of Planning's (DoP) consideration. These relate to:

- Noise Impact Assessment
- Water Issues
- Air Impact Assessment
- Threatened Species – Green and Golden Bell Frogs
- Aboriginal Cultural Heritage; and
- General Matters

The following is a summary of the key issues identified during DECCW review of the EA.

1. Noise Impact Assessment – Russell Vale Site

The EA states that one of the major noise sources at the site is from existing conveyors, however there has been no assessment on reducing noise emissions from the conveyors. The primary noise mitigation proposed is the construction of noise barriers, however their installation is subject to site constraints. This appears to raise doubt about the ability of the project to meet Project Specific Noise Levels because it is dependent upon the installation of these measures.

DECCW is not in position to provide noise limits for the Project, at this time, until the above matters are resolved. This is because if noise limits are set in the absence of clear committed noise mitigation a situation may arise where they cannot be complied with. Further information regarding these matters is detailed in our attached comments.

2. Threatened Species – Green and Golden Bell Frogs

The proposal is seeking approval of pit top operations at the Russell Vale site which also includes the construction of new equipment and pit top works including bund walls, roadways and stock piles. In addition the works also involve the reinstatement of Bellambi Creek through the site to address local flooding issues. However, the realignment of Bellambi Creek will involve the removal of Dam 6 which currently provides foraging, breeding and sheltering habitat for the endangered Green and Golden Bell Frog (GGBF).

To mitigate the impacts associated with the Project the proponent proposes to enhance a nearby dam (Dam 5) on the site if GGBF are found. DECCW does not support this condition and requests that Dam 5 should be enhanced in any case. This is because:

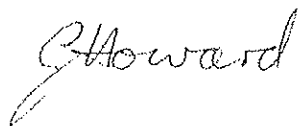
- 1) the existing data showing presence of GGBF in the Project Area
- 2) Dam 6 is already known to contain actual habitat for GGBF; and
- 3) There are difficulties associated with locating GGBF during surveys.

DECCW provides further justification on the above matters in our attached comments and also provides comments and additional information on:

- Mitigation measures for the loss of additional habitat
- Creation of a GGBF Management Plan; and
- Translocation.

Should you require any further information or clarification on the above matters please call Peter Bloem on (02) 4224 4100 at the Department's Wollongong Office.

Yours sincerely



14 DEC 2010

GISELLE HOWARD
Director Metropolitan
Environment Protection and Regulation

Att:

(N:\PLANNING\GENERAL\PW DOC10-48299 NRE NO 1 RESPONSE TO EA.DOC)

Attachment

Department of Environment, Climate Change and Water Comments on NRE No 1 Colliery – Preliminary Works (10_0046)

DECCW has undertaken a review of the EA and provide the following comments including suggested amendments to Statement of Commitments (SOC) additional SOC's and/or Approval Conditions for Department of Planning's (DoP) consideration.

1. Noise Impact Assessment

1.1 Mitigation Measures

Department of Environment, Climate Change and Water (DECCW) is not in a position to provide noise limits at this time until the following matters are resolved.

1.1.1 Conveyors

Section 8.1.1 of the NRE No 1 Colliery Preliminary Noise Assessment, October 2010 states that: *"the major contributing noise sources at receiver locations are the existing conveyors. The results also indicate that in order to achieve further noise reductions during the night time period mitigation of the existing conveyors would be required"*.

A review of the Environmental Assessment (EA) indicates that there has been no assessment on reducing noise emissions from the conveyors, despite being identified as a significant noise source. For your information Port Waratah Coal Kooragang Island Coal Terminal has recently achieved significant noise reductions by implementing Best Management Practice (BMP) noise mitigation measures on their conveyors and conveyor drives.

DECCW considers that the implementation of BMP noise mitigation for conveyors at the site should be assessed as part of this proposal. All new conveyors at the site should achieve the Port Waratah Coal Standard however this assessment would need to examine what reasonable and feasible mitigation BMP measures could be achieved at this site.

1.1.2 Noise Barriers

Noise mitigation measures proposed in the EA state that in order to meet the Project Specific Noise Levels (PSNLs) the following mitigation measures are recommended:

- *Three metre high barrier to the south of Broker Street near the intersection with West Street, subject to power line constraints; and*
- *3.6 metre high barrier to the north of the internal access road from weighbridge to the Princes Highway.*

In relation to the latter recommendation the draft Statement of Commitments (SOC) states that the construction of a new noise barrier is also subject to site constraints. It appears that there is uncertainty in whether these primary noise mitigation measures can actually be implemented and this raises doubt on the ability of the project to meet PSNLs.

DECCW recommends that further information be sought from the proponent on whether these measures can be achieved or if not, what other reasonable and feasible mitigation will be proposed. This is to ensure that the PSNLs will be achieved.

1.2 Recommended Conditions

DECCW also recommends the following requirements be sought as either additional SOCs or be secured as conditions of Approval:

- a) *Truck transport of coal from the premises is restricted to 7am to 6pm Monday to Friday and 8am to 6pm Saturdays. No truck transport of coal from the premises is to occur between 10pm and 7am, or on Sundays.*
- b) *A Traffic Noise Management Strategy (TNMS) be developed by the proponent, for the purposes of construction and operational noise impacts prior to commencement of construction and to improve operation transport, to ensure that feasible and reasonable noise management strategies for vehicle movements associated with the facility are identified and applied, that include but are not necessarily limited to the following:*
 - *driver training to ensure that noisy practices such as the use of compression engine brakes are not unnecessarily used near sensitive receivers*
 - *best noise practice in the selection and maintenance of vehicle fleets*
 - *movement scheduling where practicable to reduce impacts during sensitive times of the day, or evening (trucking shall be contained to day and evening operations only)*
 - *communication and management strategies for non licensee/proponent owned and operated vehicles to ensure the provision of the TNMS are implemented*
 - *a system of audited management practices that identifies non-conformances, initiates and monitors corrective and preventative action (including disciplinary action for breaches of noise minimisation procedures) and assesses the implementation and improvement of the TNMS*
 - *specific procedures to minimise impacts at identified sensitive areas*
 - *clauses in conditions of employment, or in contracts, of drivers that require adherence to the noise minimisation procedures and facilitate effective implementation of the disciplinary actions for breaches of the procedures.*

2. Air Impact Assessment

2.1 Internal Haul Road

During a recent DECCW site audit, dust from internal haul roads and vehicle entrained road soiling was identified as a major source of dust. The NRE No 1 Colliery – Preliminary Works, Air Quality Assessment prepared by ERM dated May 2010 recognises that dust will be generated as a result of movement of haul trucks around the site. The EA also states that dust from exposed areas will be managed using water suppression.

In response to this audit the proponent advised DECCW that they would seal the new main haul road as part of this Part 3A application. In addition small areas on the upper pit top would be sealed over time. The sealing of key transport haulage roads and heavily trafficked work areas is recognised as BMP for dust suppression. In contrast the EA indicates that this road may only be partly sealed.

DECCW recommends that the new haulage road be completely sealed and maintained with an aim of preventing entrained and wind blown dust emissions. DECCW recommends the following conditions be sought as additional SOCs or be secured as conditions of approval.

- *The new main haulage road must be sealed and maintained with an aim of preventing entrained and wind blown dust emissions.*
- *The new haulage stock road must be designed, constructed and maintained in a manner that allows the operation of heavy machinery without breaking up of the sealed surfaces.*

2.2 Off site Transport

An issue that has caused public complaint to DECCW involves the tracking of materials onto Bellambi Lane. The EA states that *"a truck wash will be utilised which is expected to drop emissions to negligible levels"*, however the EA contains no discussion nor definition on what constitutes "negligible levels of emissions". In addition the EA provides no details on the performance of the existing truck wash in meeting the stated performance outcome. In contrast the EA indicates that an alternate truck wash system will be trailed to minimise drip waste.

The EA proposes trials on alternate truck wash systems. DECCW considers truck wash technology is not unique in the mining and industrial sector. DECCW recommends that either the existing truck wash must be upgraded or a new truck wash installed that prevents material carry over onto sealed roads. DECCW recommends the following requirement be sought as an additional SOC or be secured as a condition of approval.

- *All vehicles leaving that have been on unsealed surfaces at the premises must be subject to equipment or facilities to provide a cleaning process for the removal of materials from wheels and underneath the bodies of vehicles. The facilities must be designed and installed or existing facilities augmented with the aim of:*
 - (a) *preventing materials being carried from the premises to external surfaces; and*
 - (b) *collecting, treating and management of polluted water from any vehicle maintenance and truck wash areas in such a way that does not cause pollution of surface and ground waters.*

2.3 Conveyors

The NRE No 1 Colliery – Preliminary Works, Air Quality Assessment prepared by ERM dated May 2010 states, as part of dust mitigation, coal will be transported on site using a network of covered conveyors. Even the computer modelling of air emissions undertaken as part of the EA was based on such measures being installed. However the Draft SOC's state that *"all conveyors will be covered where practicable"*.

DECCW considers that the covering of conveyors constitutes BMP for material handling, however it appears that there is uncertainty on whether such dust mitigation measures can actually be implemented at the site. It also raises doubt on the outcomes of the computer modelling predictions which are currently predicting compliance with the DECCW air quality impact criteria.

DECCW recommends that further information be sought from the proponent that these measures can be achieved in order to prevent visible dust emissions from material handling and transfer and if not, other reasonable and feasible dust mitigation measures proposed and committed to as part of this Project Approval can be installed.

3. Water

3.1 No 4 Shaft Wastewater Management

Black and grey water at the No 4 Shaft is treated on site in separate wastewater treatment facilities. Treated black water is disposed of via spray irrigation or alternatively collected by a licensed contractor for disposal. The EA states that: spray irrigation on the site is in accordance with the former *DEC Environmental Guidelines for the Use of Effluent by Irrigation 2004*. Whilst the stated guideline title is not entirely correct, DECCW considers that the wastewater treatment system and associated effluent irrigation area should be meeting contemporary standards and should be reflected as a SOC. DECCW recommends the following additional SOC be sought from the proponent or be secured as a condition of Approval:

- *The effluent treatment and irrigation system must be designed, installed, operated and maintained in accordance with the requirements contained in DECCW's guideline: Use of Effluent by Irrigation, October 2004.*

Treated grey water is collected and mixed on site with both mine water and stormwater where it is reused underground. The proponent has indicated that as part of a continuing program of mine upgrade and improvements to water quality being used underground, tertiary treatment is being installed to meet reuse requirements detailed in the former *DEC Environmental Guidelines for the Use of Effluent by Irrigation 2004*. DECCW considers that the appropriate standard to be used when considering wastewater reuse purposes should be the *Environment Protection and Heritage Council, the Natural Resource Management Ministerial Council and the National Health and Medical Research Council: Australian Guidelines for Water Recycling Series, 2005-2009*. In this regard the following amended SOC should be sought from the proponent or be secured as a condition of Approval:

- *A treatment system must be installed at the No 4 shaft that allows the reuse of treated wastewater to meet appropriate criteria contained in the Environment Protection and Heritage Council, the Natural Resource Management Ministerial Council and the National Health and Medical Research Council: Australian Guidelines for Water Recycling Series, 2005-2009.*

3.2 Russell Vale Site

Works at the pit top at the Russell Vale site propose the reinstatement of Bellambi Creek. There is a high risk of water pollution during the construction phase unless this is carefully managed. DECCW recommends that a detailed soil and water management plan be prepared that documents measures on the site that will minimise water pollution. DECCW also recommends that the existing underground stormwater diversion pipeline remains in use until such time as the creek flow diversion works have been completed and stabilised. DECCW recommends the following additional SOC be sought from the proponent or being secured as conditions of Approval

- *The existing underground stormwater diversion pipeline remain in use until such time as the creek flow diversion works have been completed and stabilised in order to minimise water pollution during the construction phase; and.*
- *A Soil and Water Management plan must be developed in accordance with Landcom 2006, Managing Urban Stormwater - Soils and Construction - Volume 1 and implemented prior to construction at the Russell Vale site.*

4. Threatened Species – Green and Golden Bell Frogs

4.1 Background

The proposal is seeking approval of pit top operations at the Russell Vale site which also includes the construction of new equipment and pit top works including bund walls, roadways and stock piles. In addition the works also involve the reinstatement of Bellambi Creek through the site to address local flooding issues.

The realignment of the Bellambi Creek into an open channel from a pipeline will require bank stabilisation and removal of Dam 6 which currently provides foraging, breeding and sheltering habitat for the endangered Green and Golden Bell Frog (GGBF). The proponent has advised that there can be no avoidance of impacts to Dam 6 without compromising site stability, changing the natural creek line and restrictions due to existing infrastructure within the site.

To mitigate the impacts associated with the project the proponent proposes:

- additional targeted survey work across the site to accurately determine presence of the species and its utilisation of the area
- if GGBF are found, enhancement of Dam 5, which contains no suitable GGBF habitat and is located approximately 30 metres from Dam 6; and
- the development of a Translocation Plan for any GGBF to be transferred from Dam 6 to Dam 5.

4.2 Enhancement of Dam 5 as proposed mitigation measure

The EA Annexure M2 of the application clearly outlines that the proposal would remove up to 0.19 ha of breeding, foraging and sheltering habitat and may disrupt the movement of the species between suitable areas of habitat with the removal of the habitat from Dam 6 representing 17 per cent of similar habitat in the study area. This assessment also states that "Dam 6 provides foraging, breeding and sheltering habitat for the GGBF". The study area associated with the EA also contains movement corridors (between breeding and sheltering locations), which encompass Dam 6.

The Draft SOC's detailed in the EA state:

- *That targeted surveys for the GGBF to be conducted in late 2010 and early 2011 at all potential habitat locations at the Russell Vale site to determine the presence of the species and the extent of their utilisation (for example, breeding, foraging, over wintering) of the site; and*
- *Should Dam 6 be verified as actual habitat for GGBF then enhancement of Dam 5 will be undertaken in consultation with DECCW and Wollongong City Council (WCC) to provide suitable breeding, sheltering and foraging habitat.*

It appears that only presence of GGBF in Dam 6 would trigger any habitat enhancement of Dam 5 as a mitigation measure. DECCW does not support this condition and requests that Dam 5 should be enhanced in any case. This is because:

- 1) existing data showing presence of GGBF in the Project Area
- 2) Dam 6 is already known to contain actual habitat for GGBF; and
- 3) there are difficulties associated with locating GGBF during surveys.

Details for these justifications are as follows:

4.2.1 Existing data showing presence of GGBF in the Project Area

The nearest GGBF record within the locality is approximately 650 m to the west of Dam 6, in Pit Top Dam (p 10, EA Annexure M2 of the application). This record is from 1997, and a more recent preliminary survey of this dam located an unconfirmed (incomplete) GGBF call in response to playback (p 20, EA Annexure M2 of the application). Hence, in the absence of a more thorough survey effort, it should be assumed that GGBF inhabit the Pit Top Dam.

GGBF are also known to occur at the Edgeworth Estate Woonona, immediately north of the Project site and Bellambi Lagoon to the east of the site. Recently frogs have also been detected at a residential property at Mountain Range Road, Woonona. (A White 2010, pers, comm, 19 November).

The DEC Draft Recovery Plan for the GGBF Feb 2005 states that the Woonona population is one of only four sub populations remaining in the Illawarra with this being the northern most Illawarra population currently known. The Plan also states that it is associated with drainage lines of Collins Creek and the Bellambi Creek system including Farrahers, Hollymount, Cawley, Russell Vale and Rixon's Pass Creeks north of Wollongong. This population also appears to utilise the coastal lagoons and wetland remnants and these drainage lines as connective corridors to other required habitat components towards the escarpment.

In summary, all of these recent records indicate that GGBF are within the mine vicinity and are likely to move through the Project Area as it contains viable GGBF habitat. The EA also recognises the presence of such viable GGBF habitat in the Project Area.

4.2.2 Dam 6 is already known to contain suitable GGBF habitat

DECCW agrees with the findings of Biosis Research that Dam 6 already contains actual habitat for the GGBF. The Draft SOC's provided by the applicant (see above) seem in contradiction to the conclusions and recommendations provided by Biosis Research. Biosis Research concluded that the proposal would be unlikely to have a significant impact on GGBF subject to:

- *The enhancement of Dam 5 (currently containing no suitable GGBF habitat elements) should be conducted using careful planning and in consultation with DECCW and WCC. This will*

ensure that the decommissioning of Dam 6 and the subsequent removal of breeding, sheltering and foraging habitat from this location is appropriately mitigated.

The Draft Part 3A Guidelines for Threatened Species Assessment, July 2005 state that developments should deliver environmental outcomes that include and not necessarily be limited to maintaining or improving biodiversity values (that is, there is no net impact on threatened species or native vegetation) and protecting the long term viability of local populations of a species, population or ecological communities.

In order to address these outcomes DECCW supports the above recommendation by Biosis Research and considers that Dam 6 does contain viable GGBF habitat. The Department recommends that the above Biosis Research recommendation be made a condition of Approval. We also recommend the following finding by Biosis Research be secured as an Approval Condition or additional SOC be sought;

The enhancement of Dam 5 is required before the implementation of the proposal, in consultation with DECCW, to a level considered satisfactory to provide ongoing habitat for this species in the area.

4.2.3 Difficulties associated with locating GGBF during surveys

The EA includes additional GGBF surveys undertaken over the first week of September 2010. This was undertaken in response to concerns about previous surveys which were undertaken outside the preferable survey period detailed in DECCW's *Threatened Species Survey and Assessment Guidelines: field survey methods for fauna Amphibians* 2009.

During this additional survey a GGBF was possibly heard at the Pit Top Dam. This record is encouraging and requires additional investigation. However it also demonstrates the difficulty in determining the adequacy of survey effort required for this species due to its cryptic behaviour. The NPWS *Environmental Impact Assessment Guidelines for Green and Golden Bell Frogs*, July 2003 states that *"It is likely that several visits to a site will be required to detect the species (ideally each survey separated by 2-4 weeks). Surveys must be undertaken during favourable seasonal and climatic conditions. Such surveys may need to be conducted over several activity breeding seasons to be successful"*.

In addition the Commonwealth's Significant Impact guidelines for the vulnerable GGBF also states that: *where possible, surveys should include use of a nearby reference site. This reference site should be a site where green and golden bell frogs are known to occur and should be visited before the survey of the site of interest to confirm that green and golden bell frogs are active and calling on that particular night. Use of a reference site will provide a measure of detectability. Where imperfect detectability is a reality of the field work, detection or occupancy modelling should be included in the assessment.* The surveys conducted so far did not include the use of a nearby reference site, or any measures of detectability.

The EA states that further targeted surveys should be conducted using the same techniques described in the report in early March (and preferably after rain) across the NRE Colliery. These surveys were to accurately determine the presence of the species and to determine the extent of utilisation (for example, breeding, foraging, over wintering sites) of the study area before the proposal might modify these environments.

DECCW agrees with further surveys, if these include reference sites in accordance with the Commonwealth Guidelines, will provide important information on the presence of the species. However, a one off survey over March will not be sufficient to provide adequate information to definitively determine presence on the site, given the cryptic nature of the species.

In light of the difficulties with detecting GGBF, and the above mentioned proofs for presence of GGBF habitat at Dam 6 and surrounding areas, DECCW requests that habitat at Dam 5 be enhanced irrespective of the outcome of additional surveys.

4.3 Mitigation measures for the loss of additional habitat

As indicated above, GGBF are within the mine vicinity and are likely to move through existing habitat within the project area. The EA Annexure M2 of the application contains a figure detailing habitat corridors and movement pathways for GGBF in the project area (Fig 5). DECCW regards this as an important base map that can be used to inform future site management for this species.

The map in Figure 5 also reveals that the frogs may be using numerous areas of the site, including existing vegetation and a number of water detention structures for movement, foraging and possibly breeding. The conclusions and recommendations of the EA propose the gathering of further information including survey, identification of habitat potential and the understanding of potential threats, to better understand how GGBF may be utilising the site.

While the assessment has concentrated on the loss of viable habitat associated with Dam 6 there has been no assessment of other habitat that may be lost as a result of the proposal, nor any measures proposed to mitigate this impact during both the construction and operational phase.

DECCW requests that DoP seek further information from the proponent on whether other GGBF habitat may be impacted or lost as a result of the proposal and if so document any additional mitigation measures. For example, DECCW sees opportunities for GGBF habitat to be incorporated into the design of the reinstated Bellambi Creek system. This has not been discussed in the EA and would compliment existing movement corridors, especially from the site to the coast.

4.4 Creation of a Green and Golden Bell Frog Management Plan

The conclusions and recommendations of the EA propose gathering of further information including surveys, identification of habitat potential and the understanding of potential threats to better understand how the frogs maybe utilising the site. While DECCW supports these efforts, we consider the missing element is how all this information will inform the construction phase and ongoing operations at the site in order to protect and manage GGBF.

In this regard we support the development of a plan of management for the site as recommended by Biosis Research. This plan could guide and inform both the construction phase and provide ongoing guidance for the GGBF Management at the site. Such plans of management have been developed successfully in known GGBF habitat areas across Port Kembla by a number of companies with these plans now part of their general environmental management systems. These plans are not only assisting in the frogs' management on these sites but are also guiding opportunities to implement conservation efforts by creating or enhancing GGBF habitat at their sites. In this regard, DECCW recommends that the following further SOC be sought from the proponent or be secured as an Approval condition:

Prior to the commencement of construction the Proponent must prepare and implement a GGBF Management Plan for the site.

The Plan must:

- a. be prepared in consultation with DECCW by a suitably qualified person*
- b. be submitted to the Director-General of DoP for approval prior to the commencement of construction*
- c. be prepared in accordance with the Draft Recovery Plan: GGBF (Lesson 1829) Recovery Plan (DECCW 2005) and the Best Practice Guidelines: GGBF Habitat (DECCW 2008)*
- d. aim to maintain or improve GGBF habitat across the NRE No 1 Colliery site,*

The Plan must also include but not necessarily be limited to the following information:

- i. Survey effort*
- ii. management measures to minimise impacts to GGBF during construction*
- iii. mechanisms to create or enhance GGBF habitat, movement pathways and corridors where possible*

- iv. *measures to improve security of each of these key sites will be explored and implemented where possible*
- v. *identification of threats and priority of actions to address threats*
- vi. *monitoring and reporting program*
- vii. *GGBF awareness program with employees and contractors.*

The above plan captures the suggested recommendations by Biosis Research and would also explore opportunities wherever possible to secure or enhance GGBF habitat on the site to create or enhance breeding, foraging and over wintering habitat or enhance movement corridors, such as the reinstated Bellambi Creek.

4.4.1 Translocation

The proponent also proposes as a Draft SOC the preparation of a Translocation Plan, with the intent of moving individuals (if identified) from Dam 6 to Dam 5. While DECCW considers the salvage of individuals from Dam 6 to Dam 5 which is only 30 metres apart, a worthwhile management approach, DECCW would not constitute this as Translocation requiring an approved Translocation Plan. DECCW considers such a measure is more about salvaging frogs during construction works and appropriately addressed through a GGBF Management Plan.

In addition, DECCW's experience at other industrial sites in known areas of GGBF habitat is that they can be encountered during construction activities when materials such as discarded timber, concrete, building materials or human refuse such as disused sheet iron and machinery are removed. Weed infested areas can also provide viable refuge habitat for the frog, while the frog can also be encountered during construction works as they can reside in trenches for refuge when forming foundations.

In this regard, we recommend the following Approval condition or additional SOC which should also form an element of the above GGBF Management Plan:

The proponent must prepare and implement a GGBF salvage program prior to any construction activities at the site. The aim of this program is to manage GGBF encountered during the construction phase of the development including the decommissioning of Dam 6. This program must be developed by a suitably qualified person in consultation with DECCW. Matters that would need to be addressed in the program must include but need not necessarily be limited to:

- a) *Survey effort - The area should be adequately surveyed by a suitably qualified ecological consultant immediately prior to activities taking place*
- b) *Notification, Reporting and Handling procedures for GGBF – Handling must be undertaken by an appropriately qualified person in accordance with DECCW Frog Hygiene Protocol*
- c) *Identifying high risk areas and activities where frogs maybe encountered and associated management strategies - for example decommissioning Dam 6, vegetation clearing and removal of non-vegetative material such as discarded timber, concrete, building materials or human refuse such as sheet iron and machinery*
- d) *A suitably qualified ecological consultant is to be onsite at all times during the proposed decommissioning of Dam 6 and clearing of vegetative and non-vegetative material.*

5. Aboriginal Cultural Heritage

5.1 Aboriginal Community Consultation

- a) *Aboriginal community consultation for this project commenced in 2008 and as such, consultation occurred in accordance with DECCW's Interim Community Consultation Requirements 2004 (ICCR). DoP, as consent authority, should clarify if they would like consultation to continue according to the ICCRs, or if they would like consultation to be conducted in accordance with DECCW's most recent Aboriginal community consultation requirements, Aboriginal cultural heritage consultation requirements for proponents 2010.*

- b) Although this application is for preliminary works, extractive works at the NRE No 1 Colliery are planned to occur over a longer period of time. DECCW recommends that the proponent develop a communication strategy to ensure continued consultation with the Aboriginal community throughout the life of the proposed mining lease. This will ensure that the Aboriginal community is kept informed, aware and involved with processes as they occur over the life of the mine. This strategy should be developed in consultation with the Aboriginal community.

Three separate areas are included in this application for consideration, they are the facilities upgrade at the Russell Vale site and extractive works at the V Mains and 309 Panel mining areas. Although the V Mains and 309 Panel mining areas are geographically distinct, they have been assessed together in the accompanying Aboriginal Cultural Heritage Assessment and therefore, are considered together here.

5.2 Russell Vale Site

- The Russell Vale site has been subject to extensive previous disturbance, including previous mining. There are no sites recorded on AHIMS within the Russell Vale area and no sites were identified during the site visit. Although ground surface visibility was poor across the entire site, the levels of disturbance are so high that it is considered that there is no possibility that any Aboriginal objects will be harmed as a result of the proposed works. The Aboriginal community concur with this.
- DECCW considers that there are no constraints to the proposed works in this area and supports the wishes of the Aboriginal community that a protocol be established for the management of any Aboriginal objects in the event that any are uncovered as a result of the proposed works. DECCW does not wish to be consulted in the creation of these protocols.
- In the unlikely event that human remains are recovered, the following steps should be taken:
 - work must cease immediately in the vicinity of the remains and the area should be secured to avoid further harm to the remains
 - notify the local police and DECCW's Environment Line on 131 555 as soon as practicable and provide any available details of the remains and their location
 - not recommence work at the particular location until authorised in writing by DECCW.

Please note, under s20 (1) of the **Aboriginal and Torres Strait Island Heritage Protection Act 1984** ("*A person who discovers anything that he or she has reasonable grounds to suspect to be Aboriginal remains shall report his or her discovery to the Minister, giving particulars of the remains and of their location*"), there is a requirement for all Aboriginal human remains that are discovered anywhere in Australia to be reported to the relevant Federal Minister.

5.3 V Mains & 309 Panel

- A search of the AHIMS register showed that there are eight recorded sites within the two mining areas, four of which are enclosed shelters and four of which are open sites (grinding grooves). No new sites were located during site survey.
- One site directly overlies the proposed mining works, site AHIMS # 52-2-1223 (Wallandoola Site 2), a shelter with deposit and grinding grooves. This site has been assessed as having moderate archaeological potential, moderate scientific significance and high cultural significance.
- Although the other registered sites do not directly overlie any proposed mining works, they may be subject to effects from mining such as subsidence, upsidence and tilt.

- DECCW recommends that a monitoring strategy be established for all registered sites within the V Mains and 309 Panel areas, particularly AHIMS # 52-2-1223. Monitoring should take place prior to the commencement of extraction, regularly during extraction and up to six months after the completion of extractive works. The Aboriginal community must be provided with opportunities to participate in the monitoring programme.
- If impacts do occur to sites, the proponent must examine strategies to stabilise and protect the sites, in consultation with the Aboriginal community and DECCW.

6. General Matters

DECCW also notes that the Project Application Area covers approximately 6545 ha covering the whole mining leases while the preliminary project has a much smaller footprint covering matters including augmenting, upgrading and using existing infrastructure, extracting some remnant coal reserves including drirage works. DECCW considers any Project Approval if granted should only cover the footprint of the project elements outlined in the EA.