

Office of the Independent Planning Commission NSW  
Level 3, 201 Elizabeth Street  
SYDNEY NSW 2000

24 February 2021

Dear Sir/Madam

**THE TAHMOOR SOUTH PROJECT APPLICATION**

Thank you for the opportunities to provide comment on the Assessment Report and draft conditions for the Tahmoor South Project Application (Project Application), as well as meeting with members of the Independent Planning Commission (IPC) on 10 February 2021.

The economic and associated social benefits of the Project Application to the Wollondilly Local Government Area (LGA) of the Project is broadly supported by Council. The collaborative relationship established with SIMEC Mining in regard to the progression of this Application and operations associated with the Tahmoor North Project as well as support and financial contributions to community events has been appreciated.

The following provides a brief overview of previous submissions and updated Council position regarding the Project Application. This correspondence is requested to be recorded as a draft submission by the IPC given that the timing for lodgement of submissions has prevented the securing of an updated formal Council position.

*(i) Overview of previous submissions regarding the Project Application*

Council's submission on the Environmental Impact Statement while recognising the economic benefits of the Project Application, requested a range of amendments to enhance its adequacy. Council, in endorsing this submission, resolved at its meeting of 18 March 2019 (RES 50/2019):

*To write to NSW Department of Planning & Environment requesting that the current application be reconsidered due to identified significant shortcomings (detailed in the draft submission).*

Council lodged a submission on the Second Project Amendment Report (Amendment Report) which welcomed the reduction in dwellings directly mined beneath by approximately 80%, as well as a reduction in the amount of vegetation clearance required at the Emplacement Area associated with the amended layout (presented in Attachment 1). However, this submission expressed Council's residual concerns over the assessment and management of potential impacts to water sources that included less reliance on sub plans such as Extraction Plans and greater consideration of impacts of the Project to the ecological health of these sources. Council also lodged a separate submission raising specific concerns over implications to the operation and future rehabilitation of the Bargo Waste Management Centre (also presented in Attachment 1).



(ii) *Updated Council position regarding the Project Application*

This submission with accompanying attachments has been distributed to Councillors for review and incorporates feedback received. The updated position of Council regarding the Project Application following a review of the Assessment Report and draft conditions prepared by the Department of Planning, Industry and Environment (DPIE) is provided below as assistance to the IPC:

- The continuation of 400 direct employment and associated social benefits has consistency with Council's Business Support Package and is supported.
- The revised layout of longwalls to achieve an 80% reduction in directly undermined residential dwellings is welcomed although issues raised over the new compensation process by residents are requested to be addressed and a detailed consultation program implemented.
- Residual concerns exist over the adequacy of the level of project design and assessment of impacts to water sources (surface and groundwater) and the intended management of these impacts by the draft conditions. Residual concerns also exist over potential contamination of groundwaters from the Bargo Waste Management Centre as a result of the Project whilst supporting of requirements for a Working Group in the draft conditions.

***The residual concerns referred to above are requested to be considered in detail by the IPC.***

(iii) The adequacy of the Assessment Report and draft conditions

The Assessment Report and draft consent conditions prepared by DPIE have a number of positive aspects. However, a range of shortcomings regarding each of these documents have been identified in responding to issues raised in previous Council submissions on the Project Application. An overview of the identified shortcomings of both these documents and their adequacy in responding to these issues is provided in Table 1 (Attachment 2). Recommended amendments to the proposed conditions designed to address these shortcomings are provided in Attachment 3. The IPC is requested to note the disappointment of Council staff that the draft conditions have not been amended in response to requested amendments provided to DPIE in November 2020.

A summary of recommended areas of investigation by the IPC in regard to the key concerns of Council are provided in Attachment 4. The Statement of Reason Report prepared by the Dendrobium Project IPC is viewed by staff as having relevance to the Tahmoor South Project Application whilst recognising the difference in geology and location of the Tahmoor South Project Application outside Drinking Catchment Areas. The IPC is consequently also requested to consider this Judgement as part of its investigation regarding a possible Determination given this relevance.

Please contact Council's Manager Environmental Outcomes, Alexandra Stengl, on (02) 4677 1100 or via e-mail [Alexandra.stengl@wollondilly.nsw.gov.au](mailto:Alexandra.stengl@wollondilly.nsw.gov.au) for any enquiries regarding this submission or to arrange further discussions with Council representatives.

Yours faithfully



Michael Malone  
**Director**  
**INFRASTRUCTURE & ENVIRONMENT**



## **Submission on modifications to the Tahmoor South Project Application**

This submission provides comments on aspects of the modified Tahmoor South Project Application, (modified Application) consistent with the following submissions that have been previously lodged by Council in relation to this Application:

- Preliminary Environmental Assessment and Standard Secretary Assessment Requirements (June 2017)
- Referral of the Project Application to the Commonwealth (including under the Water Trigger provisions) within the *Environment Protection and Biodiversity Conservation Act 1999* (November 2017).
- The exhibited Environmental Impact Statement for Tahmoor South (March 2019).
- The Response to Submission and first amendment to the Project Application (April 2020).

The comments are based on a review of applicable aspects of the Second Project Amendment Report (Amendment Report) as well as the Project Amendment Report (PAR) and Response to Submission Report (RtS) Report by Council. It also incorporates information contained in a presentation provided by representatives of SIMEC Mining (SIMEC) to a Councillor Workshop, which has been appreciated.

### **PART A: INTRODUCTION**

#### **Scope and structure of this submission**

This submission is based on applicable resolutions of Council as well as issues raised by Council and feedback received by the community it represents that have been detailed in the submissions listed above. The submission contains comments, position and requested action by the Department of Planning, Industry and Environment (DPIE) in relation to relevant events or activities of Council that have occurred since the lodgement of Council's submission on the EIS in May 2019. The DPIE is requested to note that a separate submission specifically in relation to implications associated with the Project Application to the Bargo Waste Management Centre has been prepared.

#### **Council support and overall Council position regarding the amended Project Application**

Council's submission on the Tahmoor South Project Application Environmental Assessment (EA) recognised the economic contributions of the Project to both the local and broader economy. The broad position held by Council that it is not opposed to mining operations provided it can occur without more than minor impacts to the natural and built environment was applied to the Tahmoor South Project Application by this submission. A list of Council resolutions that defines Council's position in regard to issues associated with the Project Application is presented in Attachment 1.

The fourteen day timeframe required by the Department of Planning, Industry and Environment for receipt of comments has prevented a formal updated Council position regarding the amended Project Application. However, Councillors were provided with this submission for review and also received a presentation by SIMEC on the project and amendments, which has been appreciated.

The removal of the two previously proposed longwalls to achieve an approximately 80 percent reduction in dwellings in Bargo directly above longwalls is welcomed as a means of responding to concerns regarding aspects of the Project Application that has been expressed to Council

by residents. The significant reduction in scale of the Project as a result of the removal of these longwalls is understood and appreciated. Other key amendments involving retaining the expansion of the Emplacement Area within the approved footprint is also welcomed.

However, concerns remain over potential implications to the operation of the Bargo Waste Management Facility operated by Council that is predicted to experience full subsidence effects as detailed in the separate submission. Residual concerns remain regarding the adequacy of the assessment and management of impacts to water sources from the Project Application (a key issue raised in Council's previous submissions). This submission requests that this issue be investigated further by both DPIE and the IPC in collaboration with research based organisations and agencies both in accordance with existing Council resolutions and in response to expressed community concerns.

### **Stakeholder engagement for the Amendment Report and subsequent stages of the Project Application**

The placement of the Amendment Report and related documents on public exhibition is recognised as not being a statutory requirement. The justification expressed by a DPIE representative for public exhibition is not necessary as the amended Project has reduced impact is recognised as being technically correct in a broad sense. However, public exhibition is viewed as being warranted given the modified application retains a range of impacts to the built and natural environment and the demonstrated high level of community interest (particularly the Bargo district) in the Project Application.

The state intent of SIMEC to distribute flyers over amendments to the Project Application in the latter part of August (after the feedback period), is welcomed in principle. However, the apparent absence of initiatives to seek feedback from the community beyond placement on the Planning Portal by DPIE is viewed with strong disappointment. Council would expect that the local community be given the opportunity to provide comment on the Amendment Report and as part of the IPC investigation (recognising constraints associated with the COVID pandemic).

## **PART B: UPDATED COUNCIL POSITION REGARDING KEY ISSUES ASSOCIATED WITH THE PROJECT APPLICATION**

### **Economic benefits of the Project application**

Council's submission on the EIS broadly agreed with the range of economically related positive social impacts associated with the Project detailed in the accompanying Social Impact Statement. The submission did however request the following additional information to allow for the verification of the stated economic benefits of the Project Application by Council's Tourism and Business Investment Section for which a response from DPIE would be appreciated:

- Details over the economic multipliers specifically in terms of indirect employment generated as a consequence of the Project Application.
- More specific information if at all possible over the likely increase in direct employment as a result of the Project Application than the current "up to around 175 employees".

The potential for the Tahmoor South Application in providing economic and social stimulus while the effects of this pandemic are being experienced is also fully recognised by Council. In this regard, the encouragement of increased local employment is a component of Council's Business Support Package that has been prepared to address effects of both the COVID pandemic and the 2019/2020 bushfires which significantly affected parts of the Wollondilly. The projected additional employment of 175 people directly related to Tahmoor South and projected is projected to increase by 245.4 full time equivalent (FTE) workers on average in

the Wollondilly region as a result of the Project detailed in the Amendment Report is therefore particularly welcomed.

### **Social benefits and potential implications associated with the modified Application**

Council is aware of opposition expressed by a number of Bargo residents to aspects of the Tahmoor Application outside the exhibition period referred to in the Amendment Report. While Council staff are aware of issues raised as a result of being copied in correspondence sent by these residents to DPIE no approach has been made to Council seeking any form of support. Council advised SIMEC in correspondence dated 10<sup>TH</sup> April 2020 in response to received representation that:

- The management of this issue is viewed as a matter between State Government, SIMEC and residents.
- Council has a responsibility to advocate community concerns and is confident that the IPC will undertake detailed and open community consultation as part of its review of the Project Application.

Council's EIS submission recognised the existence of the well-established process for monitoring and repairing damage to buildings caused by mine subsidence but referred to feedback received expressing concerns over this approach from members of the local community. The approximate 80 percent reduction in residential dwellings directly above longwalls is recognised as being highly beneficial in responding to community concerns. However, social and economic implications the remaining 143 potentially affected dwellings as well as additional (unspecified) dwellings in close proximity to the longwalls are viewed as existing and warranting careful management.

The potential impacts to private bores from subsidence induced impacts was noted to be a common issue raised in the correspondence from residents to DPIE copied to Council staff. The analysis of bores and statements within the Amendment Report that there will be a reduction in number of private bores impacted from 52 to 44 as a result of modification and 10 bores at risk of requiring 'make good' (rehabilitation) is viewed as broadly acceptable. The Report is however considered to contain a generic nature statement regarding this issue "*it is understood three bores are used for business purposes*" that warrants clarification. **The DPIE is requested to note any impact to the productivity of these bores would be viewed with concern given economic and social implications as well as water supply issues within a broader context.**

The ongoing consultation by SIMEC and intended consultation detailed in the Amendment Report as well as presentation provided to Council is welcomed. **The DPIE is requested to ensure conditions are contained in the Determination which require compliance with the stated consultation in this Report and that Extraction Plans be required to contain detailed consultation plans that reflect applicable components of the Social Impact Statement that accompanied the EIS. The DPIE is further requested to include conditions requiring on-going monitoring of impacts to private bores and that any impacted bore be rehabilitated to its former pre mining condition.**

### **Key environmental issues associated with the amended Project Application**

- (i) *Potential impacts to water sources (surface and groundwater)*

#### Previously expressed Council position

The protection of ground and surface waters, (including the ecological health of waterways), from subsidence related impacts associated with the Project Application was a key issue raised in Council's EIS submission. It requested that DPIE Provide a response to all

identified areas of concern and position of Council outlined in the submission prior to the referral of the Project application to the Planning Commission. Key positions expressed in this submission were that *“all potentially affected watercourses should be subject to detailed assessment within a catchment context”* and *“any watercourse that is identified as being impacted by mining operations should be rehabilitated to its former condition that includes ecological health”*.

#### Updated Council position

The conclusion within the Amendment Report that impacts to surface waters and groundwaters has either been maintained or reduced as a result of the removal of the two longwalls and other initiatives including enhanced waste water treatment is agreed with in principle. However, the modified application and reviewed documentation is viewed as not adequately responding to a range of requests from Council for greater scientific investigation on likely impacts to ground and surface waters. While not a matter for Council, it would appear that a number of issues raised in submissions from research based agencies and institutions including the Commonwealth Independent Expert Committee (IESC) have also not been adequately responded to.

As an updated position, Council retains residual concerns regarding potential impacts to surface and groundwater sources associated with the modified Project Application. **The DPIE is consequently requested to ensure that these impacts are further investigated as part of the preparation of its Report to the IPC in consultation with research based agencies and organisations.**

#### *(ii) Vegetation clearance associated with the expansion of the Emplacement Area*

##### Existing Council position

Council's EIS submission expressed the view that options for the reuse of the generated rejects be investigated in detail as a means of reducing the proposed removal of 34ha of native vegetation of largely high conservation value was warranted. It also expressed the view that the numbers of credits required for removal of threatened species for the expansion was significantly in excess of what would be considered a high level for applications where Council was the consent authority.

#### Updated Council position

The further amendment of the Project Application to retain vegetation clearance to the approved development footprint of the facility is strongly welcomed. **Council would however request that DPIE require SIMEC to continue to investigate means of reusing the generated rejects as a means of enhancing the sustainability of the Application as well as reducing the understood 14 ha of vegetation to be removed, which is understood, was previously approved as part of Tahmoor North operations.**

### **PART C: COMMENTS ON RESPONSE TO KEY ISSUES RAISED IN COUNCIL'S EA SUBMISSION**

The tight timeframe for both the submission on the Response to Submission Report and the Amendment Report has prevented the provision of detailed commentary on the response by the SIMEC to the wide variety of issues contained in Council's EIS submission. This part of the submission consequently provides updated comments in relation to specific concerns of Council and the local community based on a review of the Amendment Report and response to Council's EIS submission contained in Attachment 2 as well as requested response by the DPIE. A summary of the specific comments provided in relation to issues raised in Council's submission on the EIS and considered adequacy of response by the proponent is presented in Attachment 2 to this submission.



## **Potential impacts to ground and surface water sources**

Council's EIS submission recognised that detailed comments on specific technical aspects of Subsidence, Groundwater, Surface Water and Aquatic Ecology sections of the document was a matter for applicable Government Agencies and research organisations such as the IESC given their highly specialised nature. Council would consequently be satisfied and comfortable for comments to be provided by these agencies and organisations in relation to these fields both in regard to the adequacy of the Amendment Report and during the IPC investigation. The following provides commentary on the response by SIMEC in either the Response to Submission Report, Amendment Report and Project Amendment Report based on key specific positions detailed in Council's EIS submission as well as requested DPIE response.

### *(i) Groundwater related impacts*

#### Council comments in EA submission

*The EIS include a description of the properties and behaviour of the groundwater environment in a lateral and vertical direction based on modelling that is informed by extensive groundwater monitoring and consistent with scientific research.*

*The groundwater assessment is not considered to include a detailed geological analysis and modelling that would identify the likely interaction of mining induced fracturing with both surface and groundwaters at the Application Stage (based on received specialist advice).*

The provision of comments regarding the adequacy of the groundwater assessment and modelling is a matter for specialist agencies and research organisations. In this regard, the above requests in Council's EIS submission were based on specialist advice received by Council staff and Council's broad expectation that the assessment and management of potential impacts to water sources be scientifically based and consistent with the most applicable scientific research.

The Project Amendment Report is recognised as containing a response to specific issues raised in various submissions from these agencies and research organisations which on occasions has been accepted as amendments to the Project Application. Council would expect that further consultation occur with the agencies and research organisations, (which must include the IESC), during the preparation of its Report to the IPC and that this report be made available to all agencies and residents that provided submissions both during and outside the formal submission period.

The comment in the Amendment Report that a peer review has identified that the updated groundwater model for the Project Application in response to feedback received is 'fit for purpose' is supported subject to agreement from personnel with expertise in groundwater issues. In addition, the Amendment Report would appear to have in large part responded to the above request within the level of expertise of Council staff. However, the focus of this response would appear to be investigation of mine induced fracturing and analysis of groundwater behaviour rather than interaction of these two features as recommended by the IESC representative.

**The DPIE is requested to obtain feedback specifically from the IESC regarding the adequacy of the groundwater component as part of ongoing consultation during the preparation of its Report to the IPC to minimise the risks to groundwater (and connecting surface) waters as a consequence of the Application. The DPIE is also requested to ensure that the stated intentions within the RtS regarding increased modelling and assessment as amended in response to additional feedback received be required to be complied with during the preparation and implementation of Extraction Plans.**

### *(ii) Assessment and management of potential impacts to surface waters*

#### Council comment

*The Risk Management Zones depicted on maps within the EIS have not been applied to all watercourses and consequently have strong shortcomings in identifying and managing impacts associated with subsidence to both the structure and ecological health of waterways in a catchment context.*

The adoption of Risk Management Zones by the EIS was supported by Council' submission in broad terms given their recommendation by the Southern Coalfields Inquiry Report and broad acceptance by subsequent documents including the Report by the Independent Expert Panel for Mining in the Catchment. The utilisation of such zones is viewed as having benefits in reducing likely subsidence induced impacts to watercourses proposed to be undermined as part of the amended application. Both the Amended Project Report and Amendment Report would appear however not to contain any comments or specific response to this particular issue. **The DPIE is consequently requested to investigate with relevant government agencies the merits of utilising Risk Management Zones for the Project Application and also ensure that the outcomes of this investigation is detailed in its report to the IPC.**

#### Council comment

*The intended approach for monitoring and managing subsidence related impacts is considered heavily dependent on detailed sub-plans prepared after Determination such as Extraction Plans as well as Trigger Action Response Plans*

Council's EIS submission recognised that Trigger Response Plans (TARP's) were necessary given the difficulty in identifying likely subsidence levels. However, it further stated that *"the defining of the triggers should be identified to the greatest extent possible at the Application Stage and not largely be the responsibility of Extraction Plans subsequent to Determination"*. The noted statements in the PAR that a range of requests contained in submissions will be incorporated into TARP'S and that a similar process utilised for Longwalls 1 and 2 associated with Tahmoor North, (supported by Council), will be utilised, and is welcomed. However, there is concern over the statement in the conclusion of the BAR that *"the revised Subsidence Assessment concluded that the levels of impact and damage to all identified natural features and built infrastructure will be manageable, as was the conclusion of the Subsidence Assessment in the EIS and can be controlled by the preparation and implementation of Extraction Plans and associated sub-plans"*.

**Council would expect that the issue of obtaining both strong scientific based subsidence assessment in partnership with strong scientific based triggers at the application stage be investigated by the IPC in consultation with agencies and research organisations with experts in this field. Council would also expect that any Determination contain a requirement that Extraction Plans contain such scientific based triggers and not be left to conditions of the Plans.**

#### Council comment

Potentially affected watercourses should be subject to detailed assessment of likely subsidence induced impacts within a catchment context.

Council's EIS submission recognised that the specialist Water Report contained a detailed description of hydrological and riparian features of potentially impacted waterways and subsidence predictions in the vicinity of these courses. However, it expressed the view that there was an insufficient of likely assessment of impacts to the ecological health of these watercourses as a consequence of subsidence associated with the Project. It also requested the realignment of the longwall layout to avoid undermining third order streams. This request

was in response to specialist advice expressing concerns over the potential for draining of pools within such order streams with resulting significant hydrological as well as ecological downstream impacts that are potentially significant.

The Amendment Report is noted to not provide a specific response to this request in Council's submission. The response detailed in the BAR is recognised as being detailed and referring to subsidence risk assessments for potentially affected water sources carried out. However, this response is viewed as having a heavy focus on the Trigger Action Response Plan approach involving the assessment of impacts then responding to impacts in the event of triggers being activated subsequent to Determination and commencement of mining operations. Similar comments were noted to have been expressed in the Final Report of the Independent Expert Panel for Mining in the Catchment which is considered to have relevance to Tahmoor South given the similarity in mining operations.

**The DPIE is requested to recommend that scientific based Triggers and measures to protect the ecological health of watercourses in a catchment context be investigated by the IPC in consultation with applicable research based agencies and research organisations. The DPIE is further requested to recommend the IPC investigate in more detail impacts on the long-term ecological health of third order watercourses and identify measures for their protection.**

*(iii) Rehabilitation of impacted watercourses*

#### Council comment

*There should be full rehabilitation of any watercourse identified as being impacted by mining operations to its former condition including ecological health.*

Council's EIS submission referred to shortcomings observed in the adequacy of the current framework involving TARP's Creek Restoration Plans required by the Division of Resources and Geoscience in achieving full restoration of the ecological health of waterways. In relation to this matter, the submission also expressed strong disappointment that the EIS had utilised local waterways within the Tahmoor North (including Redbank Creek) as the basis for its viewpoint that these impacts will be effectively managed within the Tahmoor South Project Area. It referred to research undertaken by Dr Ian Wright that identified significant impacts from mining to the condition of this watercourse as the basis for these concerns.

There is consequently concerns over statements in both the Amendment Report and PAR that the current process for rehabilitation of works involving TARP's and potentially Creek Management Action Plans is intended to be adopted for the amended Project Application.

**Council would therefore request that the DPIE in its report requested that the IPC carry out an investigation into a suitable framework that would achieve full restoration of creeklines impacted by mining to their formal ecological condition as recommended in its EIS submission.**

*(iv) Response to the Peer review on aspects of the EIS by Dr Ian Wright regarding impacts to aquatic ecology and licenced discharges*

#### Details of the Peer Review and requested DPIE response

Dr Ian Wright carried out a peer review of the adequacy of the aspects of the Surface Water and Aquatic Ecology Section of the EIS that included assessing and managing impacts resulting from the discharge of treated mine water under an EPA licence for Council. Council's EIS submission requested that the DPE provide a response to Council all findings

of this Peer Review prior to the forwarding of the Application to the Planning Assessment Commission as well as make this response publicly available.

While the PAR contains a response to issues raised in the Peer Review, there is an absence of a response regarding this issue in the Amendment Report. Both these documents have been forwarded to Dr Wright for review given the peer review accompanied Council's submission and advice from DPIE that feedback other than government agency stakeholders would be accepted. The short time frame for the provision of comments has presented the inclusion of any comments on both these documents by Dr Wright. **It is requested and would be appreciated if firstly Dr Wright could be formally notified by DPIE to provide comment given his expertise and secondly defer finalising its Report to the IPC should he elect to provide comments.**

#### Issues associated with Discharges

In relation to this matter, the DPIE is requested to note that discharges from the colliery are upstream from Mermaid's Pools on the Bargo River that is a popular recreation destination, particularly during the warmer months. The DPIE is further requested to note that this River and adjoining bushland has high natural, cultural and aesthetic value and is viewed as an important asset by both Council and the local community. This importance is illustrated by the recent announcement by the NSW Government to investigate the establishment of a National Park.

Consequently, the addressing of issues raised in the Peer Review by Dr Wright regarding downstream impacts associated with licenced discharges is of high importance to Council. The issues experienced by SIMEC with its former Water Treatment Plant is recognised and the intention to install a new Plant at the site is welcomed. However, the DPIE is strongly requested to thoroughly consider all issues raised in submissions regarding this matter during its preparation of its report to the IPC. It is also requested to hold discussions with the NSW Environment Protection Authority to ensure close correlation between the licence for discharges and Determination that produces an outcome that prevents adverse impacts to the condition of downstream waterways.

#### **Impacts to biodiversity associated with the modified application**

Council's submission recognised the role of the (now Environment, Energy and Science Division) in the protection and management of biodiversity and provision of comment regarding this issue on the Project Application. A review of the submission provided by this Agency identified broad agreement with Council's submission and issues raised. The following provides comments on the response by SIMEC to key issues raised in Council's submission that are pertinent to biodiversity in NSW and requested response by DPIE.

##### *(i) Impacts associated with vegetation clearance for the modified application*

Council's EIS submission raised issues associated with the amount of clearance of the Critical Endangered Ecological Community Shale/Sandstone Transition Forest (SSTF) as well as threatened species and their habitat within this community for surface infrastructure. The modifications to the layout that have occurred with the amended application are recognised as reducing the level of biodiversity impacts associated with surface infrastructure and are supported.

**It is however considered warranted and requested that the DPIE request the investigation of possible additional measures to reduce the proposed stated unavoidable impact to SSTF of 10.10 ha by the modified application by both SIMEC and**

**the IPC given the conservation status of this ecological community.** This viewpoint is considered consistent with the avoidance and minimisation measures within the Framework for Biodiversity Assessment and noted comments in the EES submission.

(ii) *Offsetting of biodiversity impacts*

Council's EIS submission requested that clarification be sought from EES over potential inconsistencies with avoidance and minimising measures contained in the *Framework for Biodiversity Assessment*. The EES is noted to raise this issue in its submission by stating "*further development of the Biodiversity Offset Strategy (BOS) is required to demonstrate that required offsetting, after all avoidance measures have been applied, can be achieved*".

The response contained in the Response to Submission Report and Amendment Report is viewed as being sufficient in terms of providing the requested clarification from Council's perspective subject to any further issues being raised by EES or during the IPC investigation. **The DPIE is requested to note in relation to this matter that Council is nearing the finalisation of a draft Biodiversity Strategy and accompanying draft Biodiversity Offset Policy for the Wollondilly LGA. Both these draft documents express a preferred position that retiring of credits occur locally where possible within the Wollondilly LGA.**

(iii) *Protection of koala habitat*

Mapping carried out by EES in partnership with Council subsequent to its submission on the EIS has identified the vegetation on the Tahmoor Colliery site as being a Primary Koala Corridor. In relation to this matter, the EES submission is noted to state the site is within a major regional koala link and the locality is also at the nexus of three mapped primary koala linkages, the Bargo Corridor, Tree Hollow Corridor and Dog Trap Corridor.

The Amendment Report is noted to state in response "*the area of potential Koala habitat to be cleared has been reduced from 43.5 to 17.26 ha. The vegetation clearing would result in minor fragmentation of potential habitat; however the clearing is unlikely to impede Koala movement as no large barriers or hostile barriers to Koala dispersal would be erected as part of the Amended Project*". The additional surveys and measures put in place to reduce the extent of the originally proposed impacts detailed in this Report is welcomed. However, it is considered additional assessment is warranted to obtain an accurate understanding of impacts and develop measures to further minimise these impacts given the conservation status of koalas and their iconic nature.

**It is consequently recommended that the DPIE in its report to the IPC recommend that the level of impediment presented by intended clearing on koala movement be investigated and that a condition which specifically requires an up-to-date analysis of the movement of any koalas as well as presence of any other threatened species be included in the Determination. It is also requested that this condition require SIMEC to consult with Council as part of this analysis for possible assistance based on local knowledge and mapping.**

**Social issues associated with the modified application**

Council's submission advised that the Social Impact Assessment was thorough, comprehensive and uses established SIA methodology. It however also requested that DPIE require on-going monitoring of noise impacts by increased truck movements as a consequence of the Project Application.

It is understood in relation to this matter that the proposed new Water Treatment, (while welcomed from a water quality perspective), will involve a further increase in truck movement for the transport of produced brine. The DPIE is requested to note that Council would expect

that on-going monitoring of noise impacts associated with this increased traffic movement occur.

### **CONCLUDING STATEMENT**

This submission recognises and welcomes the predicted contribution of the Tahmoor South Project Application to the local and regional economy including securing the continued additional 175 jobs as well as the continued employment of 400 employees as part of the overall Tahmoor Project. The modifications and associated impacts to the scale of production in achieving an 80 percent reduction in number of dwellings directly above longwalls and retaining vegetation clearance to the approved footprint for the existing Emplacement Area is also welcomed by this submission.

However, this submission raises residual concerns consistent with issues raised in Council's submission on the Environmental Impact Statement (EIS) particularly in regard to impacts to water sources given the small extent in reduction of watercourse length intended to be undermined by the amended Project Application. This submission requests that these concerns be investigated by both the Department of Planning, Industry and Environment and Independent Planning Commission in collaboration with applicable government agencies and research organisations. This submission also refers to a separate submission on the modified Project Application prepared by Council's Waste Services Section that raises on-going concerns over potential implications to the ongoing operation of the Bargo Waste Management Centre.



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R U R A L L I V I N G

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Planning & Assessment Group  
Department of Planning, Industry & Environment  
c/o [Andrew.Rode@planning.nsw.gov.au](mailto:Andrew.Rode@planning.nsw.gov.au)

18 August 2020

Dear Sir,

**SUBMISSION REGARDING THE IMPACT OF TAHMOOR SOUTH PROPOSAL ON THE BARGO WASTE MANAGEMENT CENTRE**

The purpose of this letter is to put the Department on notice of Council's objection to the mine extension with respect to the impacts on the Bargo Waste Management Centre (BWMC), in the strongest terms. A further detailed submission from Council's solicitors will be provided shortly.

The BWMC is a Council managed landfill facility, which services the local community, predominately the southern townships of Wollondilly including Bargo, Tahmoor, Thirlmere and Picton. The facility has been in operation since 1966 and is nearing the end of its landfill operational life. The landfill operation commenced prior to the declaration of mines subsidence in the district and; therefore, was not designed to consider mining subsidence impacts. Council is proposing that a waste transfer station will be commissioned at this site under its current EPA licence.

The potential impacts associated with mining operations on the condition of surface and subsurface BWMC infrastructure is of strong concern. The concerns are both operationally and from a licence compliance perspective, even after the eventual closure of the landfill.

In the Response to the Council submission on Tahmoor South proposal and EIS, SIMEC, in regards to BWMC, suggested that subsidence impacts on the facility were considered to be low, even though the impacts potentially result in slope instability and disruption to surface water and waste water treatment. Council believes that the potential resulting breaches of its EPA licence have not been considered in this assessment and, in part, leaves uncertainty regarding environmental risks as well as a question over permissibility with the proposal and its impacts on an existing facility.

Whilst Council appreciates that damage to assets can be engineered to reduce impacts and can be rectified if damaged by subsidence, Council's main concern is that the impacts may cause a breach its EPA Licence by causing discharge and in turn pollution of waters or air in contrary to the *Protection of the Environment Operations Act 1997*.

Therefore Council would like to understand how a consent under the Environmental Planning & Assessment Act 1979, could be issued when it surmises that there would be probably damage to a licenced facility and in turn cause a potential breach of the *Protection of the Environment Operations Act 1997*.

Council would like to raise with the consent authority a concern that to grant consent for the revised mining proposal under our operational licenced waste facility may not be permissible under the EP&A Act. Essentially, Council requests that the DPIE impose conditions which eliminate or mitigate the adverse impacts on BWMC and; therefore, the extent of mining may need to be adapted to avoid and minimise impacts. If modification of the mining plan is not immediately possible, to insist that the consent authority refuse to grant development consent to the mine extension until appropriate and agreed mitigation measures are developed.

We wish the matter to be reviewed fully and that a satisfactory resolution of the matter be proposed by the proponent.

Please contact Council's Manager of Environmental Outcomes, Alexandra Stengl on 4677 9577 or via e-mail [alexandra.stengl@wollondilly.nsw.gov.au](mailto:alexandra.stengl@wollondilly.nsw.gov.au) to arrange a meeting and/or to discuss aspects of this submission.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'Michael Malone', with a long horizontal flourish extending to the right.

Michael Malone  
DIRECTOR  
INFRASTRUCTURE & ENVIRONMENT



# COMMENTS ON THE DRAFT CONDITIONS FOR TAHMOOR SOUTH

## PART A OF THE DETERMINATION: ADMINISTRATIVE CONDITIONS

### Definitions

- Opposition is expressed to the use of terms 'minimal and negligible' in regard to performance measures. Prescriptive scientific based measures that can be readily monitored are requested which are detailed in subsequent sections of these comments.
- It is suggested that these terms be removed from the list of definitions within the Determination if only used for the above performance measures. If used for other parts of the Determination, the current definitions are however still requested to be amended to be more prescriptive.

### Obligation to minimise harm to the environment

- It is recommended that this condition be amended to state "*that all feasible and reasonable measures be undertaken to prevent impacts to the environment*" ....
- It is recommended that in addition to the above obligation, the Determination contain a separate item (potentially) at the end that contains prescriptive and readily monitored commitments for key impacts to the natural, cultural and built environment. Suggested commitments for impacts to water sources are:
  - No exceedances of defined local water quality objectives in receiving waterways from discharges except in extenuating circumstances (such as unavoidable pollution incident).
  - Appropriate setbacks for longwalls that would prevent fracturing to third order streams or above based on the approach detailed in the Project Advice from the Independent Expert Scientific Committee be incorporated into the project layout.

### Terms of Consent

*Condition A2: The development may only be carried out generally in accordance with the EIS*

- This condition is viewed as not being sufficiently prescriptive to ensure compliance with the EIS and subsequent amendments.
- The condition is not considered to recognise the wide variety of scientific based recommended amendments to the EIS and subsequent amendments by Council and applicable Government agencies and research organisations. These amendments were designed to enhance the adequacy of these documents in the management of potential impacts associated with the Project as well as Determination.
- It is recommended that the proposed condition be amended to require that the development be carried out in accordance with the EIA and with demonstrated consideration of Study Requirements and advice provided by Government Agencies and research institutions.
- It is further recommended that the Determination require demonstrated consistency with all applicable Policies and Guidelines (that can be presented as an attachment to the Determination).

### Evidence of Consultation

- It is recommended that the Determination require that the proponent prepare and implement a detailed community consultation strategy that is in addition to the Community Consultation Committee. This is viewed as particularly important by Council given the strong level of community concern that has been raised by Bargo residents.
- The inclusion of a condition for “*a stakeholder engagement plan to guide the evaluation and implementation of social impact management and mitigation measures detailed in the requested Social Impact Assessment that must be approved prior to the commencement of second workings*” is noted and supported.
- It is however recommended that there be a condition in the Determination that requires the preparation of a wide encompassing community engagement plan that is completed within a practical timeframe after consent. It is recommended that such a Plan address amongst other matters subsidence impacts to structures and dams, traffic, air quality and any other community concern. It is requested that the condition require the provision of this Plan to Council for review prior to being provided to DPIE for approval.

### **Truck Movements**

- It is recommended that Condition A2 Transport Operations be amended to require that the applicant also ensure that all laden trucks tires are clean.
- It is recommended that Condition A3 (a) and (b) be amended to include the following including all road structure/furniture such as culverts; bridges; signs and line markings after the word ‘routes’.

### **Protection of Public Infrastructure**

- It is recommended that the title of this section of the Draft Determination be amended to Public Infrastructure and Facilities.
- It is requested that an additional condition be included that requires the applicant undertake consultation with Wollondilly Shire Council as soon as practically possible to prevent any disruption to the operation of impacted facilities.

### **Subsidence impacts to dwellings and related structures**

- There is an apparent absence of specific conditions that would require detailed engagement with individual property owners identified as being directly and indirectly impacted by the modified application.
- It is recommended that there be a condition that requires on-going consultation with consultation with all potentially affected property owners/renters as part of the broad community engagement referred to above that includes resolving issues experienced with the subsidence compensation process overseen by Subsidence NSW.

## **PART B OF THE DETERMINATION: SPECIFIC ENVIRONMENTAL CONDITIONS**

### **Offsite water discharges and transfers**

*Condition B30: The Applicant must ensure that all surface discharges from the site comply with all relevant provisions of the POEO Act, including any discharge limits (both volume and quality) set for the development in any EPL*

- This section of the Determination is recommended to be amended to include a further condition that would require the operation of the Colliery site in a manner that prevents

adverse impact to the ecological health of waterways (except in extenuating circumstances such as a pollution incident based on definitions within the *Protection of Environment and Operations Act 1998*).

### **Water Management Performance Measures**

As a general comment, the current performance measures within the draft conditions are viewed as being objectives and/or actions. It is consequently recommended that the Table within this part of the draft conditions be adjusted to contain measurable prescriptive outcomes that would readily enable the environmental performance of the Project to be monitored and assessed.

#### Performance Measure

*Develop site-specific in-stream water quality objectives in accordance with the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC & ARMICANZ, 2000) and Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006).*

#### Comment

- The Project Standard Secretary Assessment Requirements (SSEAR's) is noted to require compliance with Study Requirements issued by DPI Water. This Study Requirements is noted to request the Project Application comply with the NSW Government's Risk Based Framework, which requires consistency with local water quality objectives at a defined reference site.
- It is consequently requested that the above Measure be amended to require any impacts associated with the Project Application on waterways comply with site specific local water quality objectives in accordance with the SSEAR and Risk Based Framework.
- In a related matter to the above, an appropriate performance measure that specifically relates to aquatic ecology is recommended in consultation with specialists including the Independent Expert Scientific Committee (IESC) and Western Sydney University.
- It is also recommended that the Determination outline procedures for the applicant to demonstrate compliance with the measures (these could be linked with EPL reporting where relevant) and consequences where there is identified non-compliance.

### **Water Management Plan**

- The context of the conditions with this Plan is uncertain in terms of application to the management of water flow on the colliery site or more broadly to watercourses. It is requested that the condition be amended to clarify the application of the Water Management Plan.
- The preparation of a separate Water Source Management Plan, (or equivalent), applying to water sources outside the colliery site prior to the commencement of any works would be supported. It is suggested this title of such a Plan would enable the consideration of both surface and groundwater's and the interaction between these sources.
- Council has expressed a position both in regard to Tahmoor South and various Government initiatives such as the Environmental Impact Assessment Improvement Project that the assessment and management of impacts should occur at the assessment state and not be left to subsidiary plans such as the Extraction Plan. It is noted with a level of disappointment that this approach has been adopted by the draft Conditions.

- It is consequently recommended that the Determination significantly expand the requirements for the 'Water source Management Plan' based on applicable SSEAR's and recommendations and consents in submissions from applicable government agencies and research institutions.
- The inclusion of a condition that requires an updated Groundwater Plan following the conclusion of the Thirlmere Lakes Research Program is supported. The requirements of the Groundwater Plan are reasonably comprehensive based on the expertise of Council staff. The preparation of such a Plan would be outside the scope of a Water Management Plan restricted to the colliery site and should be incorporated in the broader Water Source Management Plan.

## Biodiversity

### (i) *Biodiversity offsetting*

- The stated offsetting credits are acknowledged as having consistency with the applicable legislative framework. It is considered however there is potential for the credit retirement requirements to be adjusted as a result of the implementation of the requirements for the Biodiversity Management Plan and possible reduction in vegetation clearance required at the Emplacement Area (described below). It is therefore recommended that the conditions be adjusted to allow for the adjustments of the credit retirement requirements following the completion of the Biodiversity Management Plan.

### (ii) *Biodiversity Management Plan*

- The requirements for the Biodiversity Management Plan are agreed with subject to the inclusion of a requirement for a detailed analysis of the current movement patterns through the site of koalas in consultation with Council and the Environment, Energy and Science Division within the EES.

## Waste

- The further amendment of the Project Application to retain vegetation clearance to the approved development footprint of the emplacement facility has been welcomed. Council's submission on the Second Amendment Assessment Report however requested that DPIE require SIMEC to continue to investigate means of reusing the generated rejects as a means of enhancing the sustainability of the Application as well as reducing the understood 14 ha of vegetation to be removed.
- The inclusion of a condition in the Determination, (which could be in the form of a Commitment), that requires the continued investigation of means of reusing the generated rejects is consequently recommended.

## Cultural Heritage

- Council does not have any statutory responsibilities for the protection and management of Aboriginal Heritage. The conditions are viewed however as having consistency with the applicable legislative and policy framework.
- It is however noted that there is an absence of a condition item that requires consultation with the local Aboriginal community.
- It is consequently requested that there be an item that requires the provision of a consultation strategy based on the applicable Guidelines to Council prior to the commencement of any works.

## Rehabilitation

### (i) *Watercourses subject to mine water discharges*

#### Performance measures

- *Hydraulically and geomorphologically stable*
- *Aquatic ecology and riparian vegetation that is the same or better than prior to grant of this consent*

#### Comment

- The management of discharges is recognised as being the responsibility of the NSW Environment Protection Authority. However, potential impacts to the condition of receiving waterways and the users of these waterways is of major concern to Council and the local community it represents. In this regard, Mermaid's Pools, a major recreation destination, is located downstream of the licenced discharge
- It is recommended that the DPIE include an appropriate condition based on the PRP and EPL that would require on-going that would allow for the identification of any impacts to the ecological health of the downstream waterway resulting from the discharge.
- It is also recommended that the draft conditions regarding this matter be amended to specify that scientific demonstration must be provided that the rehabilitation of any impacts attributed to mining to watercourses has fully restored their ecological health that existed prior to commencement of mining operations.

### (ii) *Watercourses damaged by subsidence*

#### Performance measures

- *Restore pre-mining surface flow and pool holding capacity as soon as reasonably practicable.*
- *Hydraulically and geomorphologically stable, with riparian vegetation that is the same or better than prior to mining*

#### Comment

- Council's submission on the Second Amendment Assessment Report requested that DPIE in its Assessment Report recommended that the IPC carry out an investigation into a suitable framework that would achieve full restoration of creeklines impacted by mining to their former ecological condition. Council's submission on the Tahmoor South EIS in this regard expressed the view that there must be full rehabilitation of any watercourse identified as being impacted by mining operations to its former condition including ecological health.
- The conditions are however viewed as not containing any reference to ecological parameters and are not considered to require the restoration to the former ecological health of watercourses based on the position of Council referred to above,
- It is consequently recommended that the performance measure be restoration of any impacted to their former ecological health in a catchment context using appropriate ecological parameters that would allow for an assessment as to whether this level of restoration has been achieved.

### (iii) *Water quality*

### Performance Measure

*Water retained on the site is fit for the intended post-mining land use/s*

### Comment

This performance measure is agreed with in principle but is recommended to be expanded to include the words “*based on the outcomes of an appropriate contamination analysis*” at the end.

### Performance Measure

*Water management is consistent with the regional catchment management strategy*

### Comment

- Clarification is sought over which Regional Catchment Management Strategy is being referred to in terms of whether it is a SIMEC or broader document. Council staff are aware of the Catchment Management Program in the process of being implemented by the EES But understand the Plan for the Hawkesbury Nepean Catchment within this Program is in its early stages.
- It is considered in this regard that consistency with a strategy does not provide a definitive framework for determining the adequacy of rehabilitation measures in regard to water quality. It is suggested an improved performance measure would be based on local water quality objectives, a noted requirement of the Project SSEAR’s.
- It is recommended based on the above considerations, that the proposed rehabilitation performance measure be adjusted to have separate items for water quality as follows:
  - **The Colliery site:** *Water management is consistent with adopted site strategy.*
  - **Water quality in waterways:** *Water quality is consistent with local water quality objectives at the defined reference site.*

## **Social Impact Management Plan**

- Councils’ submission on the Tahmoor South EIS provided support to the accompanying Social Impact Assessment. However, clarification over the relationship between this Assessment and proposed Social Impact Management Plan (SIMP) and whether this Plan needs to have a level of consistency with the Social Impact Assessment Guidelines was sought from the DPIE.
- Each of the intended stated components of the Plan within the draft conditions is agreed with in principle and the intention for the Plan to be prepared in consultation with Council, the local community and other stakeholders is welcomed.
- A previous section of these comments has recommended a condition requiring the development and implementation of a broad encompassing Community Engagement Strategy. It is recommended that item g for the SIMP be adjusted to state “*Evaluate the adequacy of the implementation of social impact management and mitigation measures based on the Community Engagement Strategy*”.

## **PART C: PERFORMANCE MEASURES: SPECIFIC ENVIRONMENTAL CONDITIONS**

### **All watercourses within the Subsidence Area**

### Performance Measure

*No greater subsidence impact or environmental consequences to water quality, water flows (including baseflow) or stream health (including riparian vegetation), than predicted in the EIS.*

#### Comment

- The above performance measure is not supported for the following reasons:
  - There is an absence of reference to measurable hydrological and ecological parameters that would allow for an assessment of impacts to the ecological health of waterways.
  - 'Impacts not greater than the EIS' is viewed as not adequately taking into consideration the wide range of specialist submissions highlighting shortcomings in the adequacy of this and related documents in assessing impacts to the ecological health of waterways.
  - The definition of 'environmental consequences' is viewed as not referring to the implications of subsidence to shallow groundwater and their interaction with surface waters.
- It is recommended that the proposed performance measure be reviewed and replaced with an alternate measure that is based on specialist advice received and in consultation with applicable specialist government agencies and research institutions.

#### **Other watercourses**

##### Performance Measures

*Negligible environmental consequences including beyond those predicted in the EIS, including:*

- *Negligible diversion of flows or changes in the natural drainage behaviour of pools;*
- *Negligible decline in baseline channel stability;*
- *Negligible gas releases and iron staining; and*
- *Negligible increase in water cloudiness.*

#### Comment

- The above performance measure is not supported on the following grounds:
  - There is viewed as being an absence of a scientific based definition of 'negligible' comprised of hydrological and ecological criteria.
  - There are viewed as being significant shortcomings in the identification and management of subsidence induced impacts to watercourses within the EIS identified in a range of submissions including the Peer Review by Dr Ian Wright from the Western Sydney University that accompanied Council's submission as referred to above.
  - There is considered an absence of consideration of potential impacts to the ecological health of watercourses.
  - The listed environmental consequences are viewed as not referring to the implications of subsidence to shallow groundwater and their interaction with surface waters.
- As above, it is recommended that the proposed performance measure be reviewed and replaced with an alternate measure that is based on specialist advice received and in consultation with applicable specialist government agencies and research institutions.

#### **Biodiversity**

(i) *Performance measures*

- *No greater subsidence impacts or environmental consequences than predicted in the EIS.*
- *Negligible impacts on threatened species, populations or communities due to remediation of subsidence cracking*

Comments

- The above measures are recognised as directly relating to subsidence impacts which are acknowledged as being low for terrestrial biodiversity.
- It is suggested however that there be a separate subheading within the conditions that would provide a performance measure relating to terrestrial biodiversity given the direct impacts of vegetation clearance associated with the Project Application.

**Additional Offsets**

Condition (C3)

*If the Applicant exceeds the performance measures in Table 7 and the Planning Secretary determines that:*

- it is not reasonable or feasible to remediate the subsidence impact or environmental consequence; or*
- remediation measures implemented by the Applicant have failed to satisfactorily remediate the subsidence impact or environmental consequence,*

*Then the Applicant must provide an offset to compensate for the subsidence impact or environmental consequence that is proportionate to the significance of the subsidence impact or environmental consequence following consultation with BCS and/or Heritage NSW and to the satisfaction of the Planning Secretary.*

Comments

- Council would as a broad position expect that State government regulatory authorities would require the full rehabilitation of any impacted natural, cultural or built feature to their condition prior to the commencement of any mining operations.
- Consequently, the adoption of an offsetting approach if the remediation of impact is not considered feasible or reasonable or the proponent has not satisfactorily remediated would be opposed in principle. In this regard, while biodiversity offsetting is recognised as being achievable, the ability to adequately offset impacts to the health of a watercourse is strongly questioned.
- Alternatively, it is recommended that the conditions require that defined Performance Measures be complied with based on approved Trigger Response Plans that are supported with commensurate base line data. It is suggested that the Determination contain an advice to the effect that if certain circumstances arrive, the applicant seek approval for alternate remediation or other approaches (that may include offsetting) from the government regulators.

**Extraction Plan**

(i) *Comments regarding specific items of the Extraction Plan condition*

The preferred view of Council is that the management of potential impacts as a consequence of mine induced fracturing not be relied upon subplans prepared post Determination such as the Extraction Plan as stated previously in these comments. The following comments are provided on proposed items of the Extraction Plan are requested to be reviewed by the IPC within this context:



- A number of aspects of the recommended condition is supported that includes requirements to update predicted subsidence levels. It is recommended in this regard that the Extraction Plan be requested to also be prepared in consultation with Council.
- There is an absence of requirements to avoid impacts as part of extraction activities.
- The preparation of the Plan should be required to be consistent with specialist advice and studies (including those produced by the IESC).
- The Trigger Response Plans associated with the Plan should be required to have a strong scientific basis and supported by extensive data.
- The Plan should be required to contain a detailed geological model that identifies the likely interaction of subsidence induced fractures and groundwaters (as requested by Council's submissions on the Project Application).

### Watercourse Corrective Management Plans

- Council has previously expressed deficiencies in the current legislative and policy framework for restoring watercourses and the ecological outcomes of the restoration process. Council's submission on the EIS in this regard requested that the DPIE request the IPC carry out an investigation into a suitable framework that would achieve full restoration of creeklines impacted by mining to their former ecological condition.
- The conditions are supported in the above context with the following amendments:
  - A timeframe be imposed for the preparation and completion of the Plans.
  - There be specific triggers/thresholds that would identify the need for their preparation.
  - The Plans be required to consider the impact and restoration of the ecological health of waterways.

### Adaptive Management Plans

- The title of this section and context is uncertain as the related controls are viewed as being directly related to performance measures for subsidence. Adaptive Management is also noted to have been utilised for Extraction Plan approvals as a means of providing flexibility for a project based on updated monitoring.
- The controls are viewed as having synergy with previous comments regarding the proposed controls under the subheading Additional Offsets in situations when the Applicant exceeds the performance measures in Table 7. It is therefore suggested based on the above that the controls be relocated to be under this Table.

### The Bargo Waste Management Centre

(i) *Technical Committee for the Waste Management Centre*

#### Condition (C14)

*Prior to commencing second workings, the Applicant must establish a Technical Committee for the Bargo Waste Management Centre, comprising engineering and geotechnical specialists, whose appointment has been endorsed by the Planning Secretary; the Applicant and Council. The role of the Technical Committee is to:*

- provide input into the preparation and implementation of the Built Features Management Plan;*
- consult with relevant statutory agencies, including the EPA and SA NSW;*
- identify all potential mechanisms for impacts of the development on the Bargo Waste Management Centre, including from non-conventional subsidence;*
- undertake a risk assessment to identify the level of subsidence induced risks;*

- (e) *recommend appropriate pre-mining mitigation measures required to reduce subsidence impacts;*
- (f) *recommend appropriate remedial measures and measures to mitigate, repair, replace or compensate predicted impacts; and*
- (g) *recommend monitoring programs, trigger action response plan(s) and communication plans to ensure the development meets the performance measures in Table 8.*

Comments

Whilst this condition is satisfactory, the following amendment is recommended:

That a reporting compliance clause be added, requesting that SIMEC provide an annual report to DPIE outlining the compliance to the condition and the technical group, by providing evidence of joint meetings, programs and any remediation efforts undertaken for each (financial/calendar) year of the project life. Failure to provide a report to DPIE and sufficient explanation of noncompliance will be a breach of consent?

(ii) *Related Performance Measure*

- Table 8 is noted to state as a compensatory measure, (reproduced below), that infrastructure be repaired by the applicant. Whilst this is a good condition, Council would like to extend the condition further to cover the cost of any environmental remediation and cost of recovery as well as potentially the investigation of infrastructure failure.

**Table 8:** *Subsidence impact performance measures – built features.*

<b>Feature</b>	<b>Performance Measures</b>
<b>Public Infrastructure</b>	
Key public infrastructure: <ul style="list-style-type: none"> <li>• Main Southern Railway</li> <li>• Remembrance Drive</li> <li>• M31 Motorway</li> <li>• Moomba to Sydney Gas Pipeline</li> <li>• Gorodok Ethane Pipeline</li> <li>• Bargo Waste Management Centre</li> </ul>	<ul style="list-style-type: none"> <li>• Always safe and serviceable</li> <li>• Damage that does not affect safety or serviceability must be fully repairable, and must be fully repaired at the cost of the Applicant</li> </ul>

Lastly, Council would like outline cost sharing regarding the investigation of any failure of the leachate system that is directly from subsidence impacts as well as the environmental costs and any impact remediation associated with such a failure.

**Overview of response by DPIE Assessment Report and draft conditions to Council's submissions on the original Environmental Assessment and Second Amendment Assessment Report**

Topic	Issue raised and requested action within Council's submission	Approach of the Assessment Report	Approach of the proposed conditions
<b>ISSUES ASSOCIATED WITH THE EMPLACEMENT AREA</b>			
<p>Emplacement Area</p>	<p>There is an absence of any firm commitment to investigate means for the disposal of coal waste (name) for re-use as a means of reducing the proposed removal of 34 ha of vegetation of high conservation value for its extension.</p> <p>All available measures be investigated that would reduce the volume of waste required to be placed at the REA.</p>	<p>The description in the report is restricted to issues associated with noise generation from the facility.</p> <p>There is an absence of discussion over means of reducing the volume of waste for storage including potential reuse options.</p>	<p>A condition requiring on-going monitoring of noise levels is provided.</p> <p>There is considered an absence of conditions or required commitments by the applicant regarding investigations for re-use of generated waste.</p>
<b>ASSESSMENT AND MONITORING OF SUBSIDENCE IMPACTS TO THE NATURAL and BUILT ENVIRONMENT</b>			
<p>Subsidence impacts to Watercourses</p>	<p>The Risk Management Zones depicted on maps within the EA have not been applied to all potentially affected watercourses.</p>	<p>The assessment report is viewed as not responding to this comment. It advises that on-going monitoring of potentially affected watercourses will be required and does not contain any viewpoint of DPIE regarding the issue of Risk Management Zones.</p>	<p>The conditions for a water management plan, surface and groundwater monitoring program and requirements for Creek Restoration Action Plans are supported in principle subject to amendments detailed in Attachment 2. However, there is an absence of conditions in regard to Risk Management Zones.</p>

Topic	Issue raised and requested action within Council's submission	Approach of the Assessment Report	Approach of the proposed conditions
	<p>The intended approach for monitoring and managing subsidence related impacts is considered heavily dependent on detailed sub-plans prepared after Determination such as Extraction Plans as well as Trigger Action Response Plans.</p>	<p>The Assessment Report has not provided a specific response to this comment. It states the "Department considers that the Extraction Plan process would be vital to monitor and manage the potential subsidence effects, and the extensive range of subsidence impacts and environmental consequences of the Project. The Extraction Plan process would also allow expert stakeholders to provide ongoing advice on the Project".</p>	<p>The DPIE has provided a condition outlining a range of requirements for Extraction Plans that include reference to Trigger Response Plans. A range of amendments to the proposed conditions to amend the requirements for Extraction Plans to consider impacts to water sources in more detail as well as enhance the scientific basis of Trigger Response Plans that includes ecological health is detailed in Attachment 2.</p>
	<p>The EIS requires updating to achieve consistency with applicable research as advice provided by Government Agencies and research organisations that includes the Independent Expert Scientific Committee.</p>	<p>The Assessment Report contains a review of the EIS specialist reports as well as received peer review. However, this Report is not viewed as adequately responding to receive specialist advice including from the Independent Expert Scientific Committee.</p> <p>In relation to this matter, while Tahmoor South is recognised as not being located within the Drinking Catchment Area, research by the Independent Expert Panel for Mining in the Catchment is viewed as having relevance due to the similarities in mining operations.</p>	<p>The condition of relevance to this issue raised in Council's submission is considered "the Planning Secretary may, in respect of ongoing monitoring and management obligations, agree to or require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them".</p> <p>The amendment of the proposed conditions to require that sub-plans such as the Water and Groundwater Plan and Extraction Plan be consistent with most recent scientific research is requested.</p>

Topic	Issue raised and requested action within Council's submission	Approach of the Assessment Report	Approach of the draft conditions
Subsidence impacts residential dwellings	Investigations over adjustments to the existing process for subsidence impacts to dwellings and other structures in response to issues raised by the local community over this process is recommended.	<p>The Report in relation to this matter is noted to state the "Department acknowledges that the current Project is likely to result in subsidence impacts to a significant number of houses and other built features". The Report is further noted to state "Department is satisfied that strict performance measures, together with an appropriate built features management plan (as a component of a robust Extraction Plan) would appropriately manage subsidence impacts on items of key infrastructure, minor infrastructure and other built features".</p> <p>However, as considered evident at the Public Hearing, the report is not considered to have adequately identified the socio-economic implications for the predicted direct and indirect subsidence induced impacts to dwellings from the modified Project Application.</p>	<p>The Department is noted to recommend conditions in the form of additional safeguards be offered to homeowners whose houses experience significant damage and/or are damaged by more than one longwall as a result of mine subsidence movements.</p> <p>However, the inclusion of a condition that requires on-going consultation with consultation with all potentially affected property owners/renters as part of the broad community engagement that includes resolving issues experienced with the subsidence compensation process overseen by Subsidence NSW is recommended.</p>
<b>POTENTIAL IMPACTS TO THE OPERATION OF THE BARGO WASTE MANAGEMENT CENTRE</b>			
Subsidence impacts to Licence Facility	The impacts associated with the change of leachate collection on the EPA Licence 6061 have not been investigated.	<p>The stated role of a Technical Committee regarding the facility detailed in the Assessment Report to "identify potential hazards, assess risks, consider options and select measures to control risks to ensure the facility remains safe and serviceable including the operation of leachate and surface water controls and rehabilitation capping to minimise potential for offsite impacts" is agreed with in principle.</p> <p>However, it is considered that the Report does not analyse in sufficient detail the environmental and legal implications of potential future contamination of groundwaters from leachate as a consequence of mine induced subsidence.</p>	<p>The conditions that requires subsidence impacts to the Bargo Waste Management Centre to be managed as part of a Built Features Management Plan required prior to the commencement of mining operations and the role and composition of the Technical Committee are agreed with in principle subject to the adequacy of concerns expressed in Council submission.</p>

Topic	Issue raised and requested action within Council's submission	Approach of the Assessment Report	Approach of the proposed conditions
<b>ASSESSMENT AND MANAGEMENT OF IMPACTS TO SURFACE AND GROUNDWATERS</b>			
Impacts to groundwater sources	The EA requires amending to contain a description of the properties and behaviour of the groundwater environment in a lateral and vertical direction.	The Assessment Report is considered to have adequately responded to this item by requiring a Comprehensive Groundwater Assessment after the conclusion of the Thirlmere Lakes Research Program.	The DPIE has proposed a condition requiring a groundwater modelling plan as part of the Groundwater Plan prior to the commencement of underground workings.
Impacts to surface water sources	A response to all findings of the Peer Review by Dr Wright on aspects of the Surface Water and Aquatic Ecology Section of the EA be provided to Council including licenced discharges from the facility	The Assessment Report is noted to refer Dr Wright's peer review in stating "it, (the peer review), shared a common view to a statement in the EES submission that <i>"impacts to some sections of 3<sup>rd</sup> order watercourses would be almost inevitable, and that insufficient justification had been provided to demonstrate that impacts would be repairable"</i> . However, the Report does not respond to specific issues raised by Dr Wright in the peer review that accompanied Council's submission.	In regard to general water quality issues, the DPIE is noted to recommend conditions regarding monitoring then remediation if identified as required based on the Trigger Response Plans. There is however an absence of conditions that specifically address requests contained in the Peer Review to achieve greater assessment and reduce the level of impact associated with the Project on the condition of waterways.

Topic	Issue raised and requested action within Council's submission	Approach of the Assessment Report	Approach of the proposed conditions
Impacts to surface water sources	<p>All watercourses impacted by mine induced subsidence be rehabilitated to their full ecological health that existed prior to the commencement of any mining operations.</p>	<p>The Assessment Report is noted to state an acceptance <i>"that watercourses will be impacted by fracturing associated with mine induced subsidence"</i>. It is also noted to refer to remediation work carried in regard to Redbank Creek and Myrtle Creek in stating that <i>"the Department supports the extensive pool remedial works being implemented by Tahmoor Coal and accepts that preliminary water level and aquatic health monitoring results suggest that the works in Pool 23 have been effective"</i>.</p> <p>As stated in the meeting with Council representatives, the work carried out to date is viewed as positive in terms of retaining water levels in pools however strong requests remain over the ability to achieve long-term ecological restoration within a broader context. This matter is viewed as not being addressed by the Assessment Report.</p>	<p>The Department is noted to recommend a condition requiring Watercourse Corrective Action Management Plan(s) be prepared for any watercourses damaged by subsidence impacts associated with the Project. It is noted further recommend a <i>"requires watercourses damaged by subsidence impacts to be restored to pre-mining surface flow and pool holding capacity as soon as reasonably practicable"</i>.</p> <p>The above conditions are recommended to be amended to specify that scientific demonstration must be provided that the rehabilitation of any impacts attributed to mining to watercourses has fully restored their ecological health that existed prior to commencement of mining operations.</p>
The EIS requires amending and updating to demonstrate that impacts associated with the Project application to local waterways will be adequately managed to prevent similar impacts to their ecological health identified by Dr Ian Wright in his research study on Redbank Creek.	<p>The EIS requires amending and updating to demonstrate that impacts associated with the Project application to local waterways will be adequately managed to prevent similar impacts to their ecological health identified by Dr Ian Wright in his research study on Redbank Creek.</p>	<p>The Assessment Report refers to creek restoration carried out on Redbank Creek and Myrtle Creek as a basis, (in part) of its conclusion <i>"the Department is confident that watercourses can be remediated and has recommended remediation activities along watercourses be implemented if impacts occur"</i>.</p> <p>The research study by Dr Wright undertaken to identify potential impacts of mining identified significant levels of contaminants in Redbank Creek. The Report is considered to rely on monitoring and remediation measures rather than detailing measures that would prevent or minimise impacts to waterways as part of the Tahmoor South Project Application.</p>	<p>The DPIE is noted to propose a similar remediation condition approach for the Tahmoor South Application as in regard to Redbank Creek and Myrtle Creek associated with the Tahmoor North Project Application.</p> <p>Amendments to all applicable conditions to achieve scientific base for triggers and greater assessment of the ecological health that includes consideration of Dr Wright's research studies. Amendments to the applicable performance measures to be more prescriptive and scientific based are also recommended.</p>

Topic	Issue raised and requested action within Council's submission	Approach of the Assessment Report	Approach of the proposed conditions
<p><b>ASSESSMENT AND MANAGEMENT OF POTENTIAL IMPACTS TO AQUATIC BIODIVERSITY</b></p> <p>Impacts to aquatic biodiversity</p>	<p>The Specialist Report is considered to have shortcomings in providing a strong scientific based framework for the management of potential impacts associated with the Project Application on Aquatic Ecology.</p>	<p>The Assessment Report is noted to include a broad reference to aquatic studies recognises there is a risk to aquatic ecology associated with the Project Application. It is however noted to have accepted the conclusion of such studies in stating <i>"that impacts to aquatic ecology will be temporary and localised"</i>.</p> <p>There is considered insufficient justification for this conclusion as the identification of impacts by the EIS are viewed as generic and the above conclusion is viewed as being restricted to pools rather than in the overall context of the watercourse.</p>	<p>The proposed rehabilitation objective within the draft conditions <i>"Aquatic ecology and riparian vegetation that is the same or better than prior to grant of this consent"</i> is viewed as positive although it is preferred that this objective state "prior to the commencement of any mining operations. In addition, the inclusion of an appropriate performance measure that specifically relates to aquatic ecology in consultation with specialists including the Independent Expert Scientific Committee (IESC) and Western Sydney University is recommended.</p>
<p><b>ASSESSMENT AND MANAGEMENT OF POTENTIAL IMPACTS TO TERRESTRIAL ECOLOGY</b></p> <p>Impacts to terrestrial biodiversity</p>	<p>The DPIE in its report to the IPC recommend a condition which specifically requires an up-to-date analysis of the movement of any koalas as well as presence of any other threatened species be included in the Determination.</p>	<p>The statement in the Assessment Report that <i>"Whilst Koalas were not detected during field surveys ... vegetation clearing would result in minor fragmentation of potential koala habitat"</i> is not opposed based on available information. However, it is considered that the Report does not adequately recognise or provide sufficient assessment of the biodiversity value of the site in terms of habitat connectivity.</p>	<p>The recommended condition regarding the <i>"rehabilitation of disturbed areas include the re-establishment of habitat for the Koala, as well as other threatened fauna"</i> is agreed with in principle. However, the inclusion of an additional requirement for a detailed analysis of the current movement patterns through the site of koalas in consultation with Council and the Environment, Energy and Science Division within the EES by the Biodiversity Management Plan is recommended</p>





