

Our Reference: 1148-3#1521

The Office of the Independent Planning Commission  
Level 3, 2001 Elizabeth Street  
SYDNEY NSW 2000  
[ipcn@ipcn.nsw.gov.au](mailto:ipcn@ipcn.nsw.gov.au)

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Dear Sir/Madam

#### **DENDROBIUM EXTENSION (SSD 8194)**

Thank you for the opportunities to provide comment on the Assessment Report and the draft conditions for the Dendrobium Colliery Expansion Project (Expansion Project), as well as the meeting with members of the Independent Planning Commission (IPC) held on 16<sup>th</sup> November 2020.

The Expansion Project is of strong interest to Council and the local community it represents and is partly located near the eastern boundary of the Wollondilly Local Government Area. Council's submission on the Environmental Impact Statement (EIS submission) recognised the economic benefits of the Project in terms of both employment and importance to the continued operations of the Port Kembla Steelworks. However, Council has also previously advised a broad expectation that mining within the Special Catchment Areas should not have an adverse impact on the long-term supply of drinking water (in terms of both quality and quantity). Council resolved at its meeting on 16<sup>th</sup> September 2019 in endorsing the EIS submission to:

*Oppose the expansion of the Dendrobium Colliery Extension mining operations and formally object to the proposal until the potential impacts on water sources (e.g. drinking water) and supplies are addressed to the satisfaction of Water NSW.*

*Request that impacts of the Project Application on the volumes and quality of potable water supply of the Wollondilly and Macarthur residents for both current population and projected growth (including Growth Areas) be reviewed.*

The Assessment Report and draft consent conditions prepared by DPIE have positive aspects that includes detailed requirements for surface and groundwater plans. However, a range of shortcomings regarding each of these documents have been identified in responding to the above resolutions of Council. An overview of the identified shortcomings of both these documents and their adequacy in responding to specific issues raised in Council's EIS submission is provided in Table 1 (Attachment 1). Recommended amendments to the proposed

## ATTACHMENT 1

**Table 1: Overview of comments on draft consent conditions and DPIE Assessment Report**

Issue	Draft Consent Conditions	DPIE Assessment Report
<p>Consistency of the Determination Report with SSEAR's, Study requirements from Government Agencies and specific Project Advice</p>	<p>The consent conditions do not have specific reference to and has inconsistencies with pertinent SSEAR's. For example, there is inconsistencies with an SSEAR item " That requires an assessment over whether the development can operate to achieve the Neutral or Beneficial Effect. The consent conditions are noted to incorporate aspects of the Final Report provided by the Independent Expert Scientific Committee and Project Advice provided by the Independent Expert Scientific Committee.</p>	<p>The Assessment Report contains detailed reference to received submission and specialist advice. However, the demonstrated consistency of the finalised Application with all SSEAR's and submissions is questioned. There is considered shortcomings in the incorporation of the received Project Advice into the Assessment Report and draft conditions.</p>
<p>Potential impacts to surface and groundwaters (both quality and quantity)</p>	<p>Performance measures are generic and insufficiently prescriptive e.g. "generally in accordance with the EIS" and "impact that is minor or negligible". There is a reliance on the assessment and management of potential impacts to surface and groundwaters on an Extraction Plan prepared post Determination rather than a detailed assessment prior to Determination. Inadequate incorporation and addressing of aspects of specific Project Advice regarding this matter that includes "the potential impacts from localised changes on ecological components of water resources also require further investigation" by the IESC". The condition regarding the Water Management Plan is uncertain in terms of application to the management of water flow on the colliery site or more broadly to the management of impacts to the condition of ground and surface waters and their interaction.</p>	<p>The Assessment Report does not adequately responding to received specialist advice such as "the IESC has a low level of confidence in the estimates of mining impacts to surface and groundwater interactions".  The Report is also viewed as having insufficient consideration of avoidance and minimisation measures prior to offsetting. This is considered highlighted by the following statement in the Report:  <i>"All parties are clear that the Project would lead to significant environmental impacts to key surface features. South 32's approach has been to accept this level of impact and to offer substantial offsets".</i></p>

# COMMENTS ON THE DRAFT CONDITIONS FOR THE DENDROBIUM EXPANSION

The following comments on proposed conditions are consistent with issues raised in previous submissions from Council related to the Dendrobium Project Application comprised of:

- Submission on the Environmental Impact Assessment Improvement Project (November 2016)
- The exhibited Environmental Impact Statement (September 2019).
- Terms of Reference for the Independent Expert Panel for Mining in the Catchment (April 2020).

The comments are provided on conditions of pertinence to the issues previously raised in the above submissions and concerns of the local community based on the subheadings within the draft Determination.

## PART A OF THE DETERMINATION: ADMINISTRATIVE CONDITIONS

### Definitions

- Strong opposition is expressed in subsequent sections of these comments to the use of the terms 'minimal and negligible' in regard to performance measures. These comments request prescriptive scientific based measures that can be readily monitored.
- The use of the term 'environmental consequences' is not opposed in principle. However, the expansion of the definition to include appropriate reference to stream ecological health and terrestrial biodiversity is requested.

### Obligation to minimise harm to the environment

- It is recommended that the wording of this item be amended to state just that all feasible and reasonable measures be undertaken to prevent impacts to the environment ....
- It is recommended that in addition to this obligation, the Determination contain a separate Obligation/Commitment Section containing 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 (unavoidable pollution incident).
  - Achieve 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.

The insertion of this Section at the conclusion of the Determination is suggested.

### 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 Standard Secretary Environmental Assessment Requirements.
- The condition does not recognise the wide variety of scientific based recommended amendments to the EIS and subsequent amendments by Council and applicable

## Water Management Performance Measures

As a general comment, the performance measures are all viewed as being objectives and/or actions. The Table is consequently recommended to 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 & ARMCANZ, 2000) and Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006).*

### Comment

- The Project SSEAR's is noted to require compliance with Study Requirements issued by DPI Water. This includes a requirement that "*Water Quality Objectives (as endorsed by the NSW Government <http://www.environment.nsw.gov.au/ieo/index.htm>) including groundwater as appropriate that represent the community's uses and values for the receiving waters*".
- It is requested that this Measure be amended to comply with the above Study Requirement.
- In a related matter to the above, an appropriate performance measure is requested to be developed specifically for aquatic ecology in consultation with specialists including the IESC and Western Sydney University.
- It is also recommended that the Determination be amended to 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 noncompliance.

### Performance Measure

*Negligible environmental consequences beyond those predicted in the documents listed in condition A2(c).*

See comments in regard to Terms of Consent.

## Water Management Plan

### **(a) Surface 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. The amendment of the condition to clarify this application is requested.
- 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. The title of Water Source management 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 the Dendrobium Project 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. The

- The conditions are viewed 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 (Allans Creek)*

#### 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 while recognised as being the responsibility of the NSW Environment Protection Authority is of major concern to Council and the local community.
- However, it is recommended that the Performance Measure be amended to require demonstrated rehabilitation of any impacts attributed to mining to watercourses has fully restored their ecological health that existed prior to commencement of mining operations. This demonstration should be based on the EPL Licence and current scientific research.
- In relation to this matter, coal wash generated by the Project Colliery is understood to be intended, (in part), be transported to the Brennan's Creek Emplacement Area. This performance measure is consequently viewed as applying (in part) to discharges from this Emplacement Area. Staff are currently participating in a working group established by the EPA for the review of the licence applying to this Area.
- The amendment of the feature for this Measure by including Brennan's Creek or removing any reference to specific water courses is recommended.

### (ii) *Mine water discharges following mine closure (from any location)*

#### Performance Measure

- *Negligible environmental consequences*

#### Comment

- There is a level of uncertainty over the application of this performance measure but is considered to largely relate to receiving watercourses from discharge locations (Allans Creek). It is however considered to have relevance to other watercourses given the findings of the Height of Fracturing Report that fracturing can extend to the surface.

The performance measure is also considered to have relevance to the recognised occurrence of disturbed aquifers as a consequence of subsidence induced fracturing re-entering watercourses downstream (noted to be contained in the definition of Environmental Consequences).

- It is considered within the above context that the proposed measure does not provide a definitive framework for determining the adequacy of rehabilitation measures in regard to water quality. An alternate improved measures based on the Project SSEAR's) and received specialist Project Advice is recommended.
- In relation to this matter, Council's Policy and associated draft Integrated Water Strategy for Wollondilly was placed on public exhibition in early 2020. A key objective of this Strategy is that development have no net adverse impact on the condition of waterways. Council would expect that the Determination require consideration of applicable local strategies including the Integrated Water Strategy following its formal adoption.
- 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.*

### Rehabilitation Management Plan

- Council has previously expressed deficiencies in the current legislative and policy framework for restoring watercourses and the ecological outcomes of the restoration process. This is viewed as being supported by comments in the Final Report by the Expert Panel that corrective action takes place a significant time period after impact has occurred.
- Council's EIS submission 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 amendment of this condition within the Determination to be subdivided into two broad components comprised of terrestrial and water features (or equivalent), is recommended. The condition items for the proposed water features component are requested to consider the above broad position of Council as well as address the following:
  - A timeframe be imposed for the preparation and completion of any Watercourse Corrective Action Management Plans (WCAMP) or equivalent.
  - There be specific triggers/thresholds that would identify the need for their preparation.
  - WCAMP's or equivalent be required to consider the impact and restoration of the ecological health of waterways.

### Mine Closure Plan

- The inclusion of a specific condition regarding a Mine Consultation Plan and requirements for the Plan to be prepared in consultation with research and government agencies is welcomed in principle. As a broad comment, staff would prefer that the condition require the provision of a Plan based on a certain milestone (such as prior to commencement of second workings). The IPC should note this is common practice in Determinations issued by Council.
- The requested items for the Mine Closure Plan are supported in broad terms within the technical expertise of Council staff. It is however considered that the condition does not adequately ensure the closure plan adequately addresses water quality issues. The Water NSW correspondence is noted to state in this regard that the Project needs to comply with the Neutral or Beneficial Effect in an overall catchment context. In addition, an SSEAR item that requires an assessment over whether the development can operate to achieve this Effect. The amendment of the condition to include an



- There is an absence of a scientific based definition of 'negligible' comprised of hydrological and ecological criteria.
- There is an absence of reference to the wide range of technical advice received including the specific Project Advice provided by the Expert Panel and IESC as well as Study Requirements by Government Agencies.
- Significant shortcomings in the identification and management of subsidence induced impacts to watercourses within the EIS identified in a range of submissions.
- There is an absence of consideration of potential impacts to the ecological health of watercourses and reference to the implications of subsidence to shallow groundwater and their interaction with surface waters. Both of these matters are noted to be the subject of a range of comments in Project Advice by the IESC and Expert Panel.
- The proposed performance measure is consequently requested to be revisited based on specialist advice received and in consultation with applicable specialist government agencies and research institutions.

## Biodiversity

### (i) Performance measures

- *No environmental consequences greater than has been offset in accordance with Table 5 and Table 6.*

### Comments

- The credit requirements contained in Tables 5 and 6 are recognised as being consistent with the Framework for Biodiversity Assessment and applicable sections of the *Biodiversity Conservation Act 2016*.
- However, the use of the term 'environmental consequences' does not provide any specific requirement or measure that is specifically related to terrestrial biodiversity (absent in the definition of this term). The use of the term and its application in the proposed measure also does not require any application of minimisation and mitigation measures in accordance with the Framework.
- It is consequently suggested that the proposed measure be amended to state demonstrated consistency with the Framework and credit retirements contained in Tables 5 and 6.

## Additional Offsets

### Condition (C3)

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

- (a) *it is not reasonable or feasible to remediate the subsidence impact or environmental consequence; or*
- (b) *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

A requirement that the Water Management Plan be prepared in consultation with Water NSW is supported in principle. In addition, the requirements for each Plan, are recognised as broadly reflecting aspects of recent scientific research without containing specific reference to this research. However, the following amendments to the condition have been identified as appropriate and are recommended:

- The condition needs to contain specific requirements for consultation during the preparation of the Extraction Plan and associated Water Management Plan as well as requirements for the incorporation of the outcomes of this consultation into the completed documents
- The condition needs to contain a range of requirements for the avoidance of impacts to natural, cultural and built features as a consequence 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 need to be required to have a strong scientific basis and supported by extensive data.
- The Plan needs to be required to contain a detailed geological model that identifies the likely interaction of subsidence induced fractures and groundwaters (as requested by Council's EIS submission and the Project Advice from the IESC).



## **ATTACHMENT 3**

### **Recommended areas of investigation by the Independent Planning Commission**

#### **Issue 1: Response of the Assessment Report to specialist advice and comments provided regarding potential impacts to surface and water sources**

- The adequacy of the Assessment Report and draft consent conditions in responding to issues raised in submissions and specialist advice given the strong recent comments provided.
- The adequacy of the approach of the Assessment Report and draft consent conditions in avoiding and minimising impacts to ground and surface water sources (quantity and quality), based on specialist advice received.
- The issue of establishing setbacks of longwalls from watercourses and appropriate distances as a means of reducing impacts to water sources from fracturing induced by mining operations.

#### **Issue 2: Scientific basis of the economic basis of the Economic Analysis and Assessment Report**

- Whether the full economic loss and full water loss have been adequately accounted for over the full life cycle of Project (including subsequent to the ceasing of mining operations).
- The scientific basis of the Economic analysis and its methodology in consideration of environmental and social impacts associated with the Project

#### **Issue 3: Security of water supply as a resource for current and projected growth**

- The adequacy of the approach by South 32 and agreed upon by DPIE for the annual payments to the Government for the Project's actual annual surface water take in terms of scientific basis, consistency with legislative framework, specialist advice and SSEAR's and ability to offset all water losses associated with the full lifecycle of the Project.
- Impacts of the Project Application on the volumes and quality of potable water supply of the Wollondilly/y and Macarthur residents for both current population and projected growth (including Growth Areas) consistent with Council's resolution.
- The overall importance of water collected within the Drinking Catchment Area as a resource for a range of utilisations including consumption, aesthetics, and maintaining green developments consistent with the NSW Government's Greener Places Framework.