EN1 – Submission to the Independent Panel for Mining in the Catchment

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EXECUTIVE SUMMARY

The purpose of this report is to inform Council of the progress of the Independent Expert Panel for Mining in the Drinking Catchment and seek endorsement of a submission on the Panel's advice to the Department of Planning & Environment regarding the impacts of mining within the Drinking Catchment Area.

It is recommended that:

- Council endorse the submission on the Terms of Reference for the Independent Expert Panel for Mining in the Drinking Catchment.
- Council seek a site visit and meeting with members of the Panel as well as a copy of the draft final Report.
- Council write to the NSW Department of Planning & Environment to:
 - Welcome the establishment of the Independent Expert Panel for Mining in the Catchment and its composition.
 - Advise that Council only provides in-principle support to the investigation by the Panel due to concerns about aspects of the issued Terms of Reference for the Panel and uncertainty over the adequacy of the response by the NSW Department of Planning & Environment.
 - Request that no Determinations be issued for any mining related application within the Catchment Area until such time that it has received and reviewed the Final Report produced by the Panel.

REPORT

INTRODUCTION

The Greater Sydney Water Catchment Area (Drinking Catchment) which occupies a significant portion of the Wollondilly Local Government Area (LGA), contains a number of approved and proposed underground mining operations. The location of these operations within the context of the Drinking Catchment is presented in Map 1 (Attachment 1).



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The NSW Government in November 2017 requested that the NSW Chief Scientist & Engineer establish an independent panel of experts to provide advice to the NSW Department of Planning & Environment (DPE) on the impacts of mining in activities in the Drinking Catchment, with a particular focus on the quantity of water in the Catchment. The issued Terms of Reference for the Panel and associated information is presented in Attachment 2.

This report recommends that Council support, in principle, the investigation by the Independent Expert Panel (the Panel) as a means of achieving current scientific advice on the potential impacts of mining operations on water supplies within the drinking catchment. A draft submission to the Panel outlining the issues requested to be reviewed and investigated has been prepared and is presented in Attachment 3. These issues are consistent with the previous adopted position of Council and the concerns of the local community regarding the impacts of mining on water sources in general (both quantity of water and as well as water quality).

This report provides background information to the establishment of the Panel, an overview of the investigation and key features and recommendations of the draft submission. The report and the accompanying draft submission are focussed on potential impacts and the management of these impacts associated with mining operations on water supply. However, the undertaking of the investigation by the Panel has wider potential beneficial implications for the management of these operations outside the Drinking Catchment given the similar types of mining operations and applicable legislation and policy framework.

BACKGROUND INFORMATION

i. Overview of impacts of mining and previous studies

The Drinking Catchment has high environmental value on a number of grounds including location at the headwaters of major river systems (including the Nepean and Georges River Systems), as well as providing habitat for a wide variety of important species. It also contains a number of swamps, (known as upland swamps), which have been identified by a wide range of researchers as having highly important environmental functions within a catchment context.



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Underground mining operations can involve subsidence due to the collapse of longwalls as a part of coal extraction activity. This subsidence can result in fractures to bedrock in water sources/waterways and associated impact to their quantity and quality, as well as impact to surrounding groundwater. This issue was the subject of investigations as part of the 2007 Independent Expert Panel Inquiry into the NSW Southern Coalfields to which Council lodged a submission. It has also been and is currently the subject of research by a range of organisations that includes the Commonwealth Independent Expert Scientific Committee (IESC) who provide specialist advice on this matter under Commonwealth legislation.

ii. Overview of Council position regarding mining operations

Council has previously provided submissions on a wide variety of mining related applications and Government policies. The basic position of Council expressed in these submissions is that it does not oppose mining operations provided there are no adverse impacts to the natural, cultural and built environment. The submissions also commonly refer to a position of Council that State Significant Development (which include mining operations) should be assessed with the same rigour as those assessed for applications received by Council. A list of resolutions by Council and submissions lodged by Council staff in regard to mining related matters since an Independent Expert Panel Inquiry into the NSW Southern Coalfields held during 2007 is presented in Attachment 4.

A specific position has not been adopted by Council in regard to the issue of mining in Drinking Catchments. While this catchment is owned and regulated by Water NSW, the development of a Council Advocacy position is considered appropriate. This report recommends the adoption of a position be considered upon review of the Panel's completed report, scheduled for November 2018.

iii. Background to the establishment of the Panel

During 2012/2013, the presence of a coal seam gas exploration licence within a portion of the Catchment Area generated particularly significant community interest as well as broad scale media coverage. At its meeting of October 2013 Council resolved to "Meet with the Premier to request a ban on CSG mining and exploration in the Catchment". The DPE received a report during this period from the proponent of the Dendrobium Colliery on impacts of mining in the catchment. This DPE also received submissions from a range of stakeholders over its considered adequacy.



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In response to these concerns, the DPE commissioned a study which, in broad terms, sought specialist advice over the height above mined longwalls where fracturing could occur. This study was provided to the DPE in March 2017 and publicly released in September 2017 following a peer review commissioned by the DPE. A key finding of this study was a disagreement with a common viewpoint of local mining companies regarding the existence of an impediment to the upward migration of impacts associated with fracturing to affect surface and shallow groundwaters. However, it also provided a number of recommendations for an extra study to "improve the confidence" in these findings. This recommendation for a study is consistent with requests contained in a wide variety of previous Council submissions.

The DPE, subsequently, issued a request for the establishment of the Independent Expert Panel for Mining in the Catchment in November 2017 following its review of the report and completion of a commissioned peer review. The media release issued by the DPE in relation to this manner stated "While coal mining has occurred in the catchment for over 160 years without any major impacts on water supply, the expert panel will look closely at any risks to the catchment's water resources".

DETAILS OF THE PANEL AND ITS INVESTIGATION PROCESS

The following provides an overview of the Panel, the scope of its investigation based on the issued Terms of Reference as well as recommended Council responses.

i. The investigation process by the Panel

The Panel has adopted a three staged process to its investigation involving review and direct stakeholder consultation (Stage 1); preparation of a draft Report and broader consultation (Stage 2); and finalisation and provision of written advice to the NSW Department of Planning & Environment (Stage 3). The Progress Report in regard to Stage 1 of the investigation can be viewed on the website of the Chief Scientist at:

http://www.chiefscientist.nsw.gov.au/__data/assets/pdf_file/0003/156333/IEP MC_Progress-Report-TOR-1.pdf.

The Chief Scientist's website states that submissions are being received up until 30 September 2018 but that the draft report by the Panel needs to be provided to the NSW Government no later than 31 July 2018. The timing of consideration of this matter by Council will provide a sufficient timeframe for the Panel to consider and incorporate issues raised into the Final Report by this required deadline.



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ii. The Terms of Reference (ToR)

The Panel is required to investigate and provide its advice based on three *Terms of Reference issued by the DPE* (as shown in Attachment 2). There are some broad issues over the wording and scope of certain individual subitems to the ToR, which may constrain the comprehensiveness of advice by the Panel to the DPE:

- The ToR do not specifically request that the Panel review and report on specific activities associated with the Russell Vale Colliery which is also in the Drinking Catchment (and within Wollondilly)
- The ToR do not specifically require the Panel review a wide range of studies and reports known to staff in recent years
- The ToR do not specifically require the Panel to investigate the impacts of mining operations on the quality of water within watercourses in the Drinking Catchment Area
- The ToR do not specifically require the Panel to examine and provide advice on measures to avoid and minimise impacts associated with mining operations to water sources (ground and surface waters) to be identified at the application stage.

The ToR contain a sub-item "In delivering its report, the Panel will provide comment and make observations or recommendations about any information of factors the Panel believes relevant, or further work that should be undertaken". The draft submission expresses the view that this sub-item provides an opportunity for the Panel to investigate issues not directly referenced in other ToR, such as those concerns listed above.

iii. Composition of the Panel and context of its Investigation

The members of the Panel appear to have sufficient experience and technical knowledge to adequately address the position of Council in regard to mining related matters in the Drinking Catchment in its Final Report to the DPE.

However, Council is entitled to have concerns over the adequacy of the response by the DPE to the Panel's report based on its previous responses to scientific advice in regard to mining related applications. For example, a Planning Assessment Commission investigating the Russell Vale Colliery expansion identified significant differences between scientific advice and the conditions being proposed by the DPE in the Draft Approval.

This report recommends that Council advises the DPE that it only provide in principle support to the investigation by the Panel subject to a demonstrated adequate response to the findings and recommendations of the Panel's reports.



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COMMENTS ON SPECIFIC TERMS OF REFERENCE AND RECOMMENDED COUNCIL RESPONSE

The ToR document contains a number of sub-items for each of the three ToRs outlining required activities and the required nature of advice and investigation by the Panel. The provision of detailed advice in regard to technical ToR sub-items is more appropriate for Technical Officers from Water NSW (as the regulator), as well as relevant research agencies. Water NSW in this regard is noted to have provided a 54 page submission to the Panel, which is available for viewing on its website. This submission has been reviewed and the findings, recommendations and conclusions of this submission have a strong scientific basis and adequately address issues raised in the attached draft Council submission.

The following provides a summary of issues suggested for review or investigation by the Panel within the ToR sub-items.

Term of Reference 1:

Undertake an initial review and report on specific coal mining activities at the Metropolitan and Dendrobium coal mine in the Greater Sydney Water Catchment Special Area, (including a review of the reliability of current methodologies used by mining companies and means to improve these methodologies).

The matters recommended for review by the Panel on sub-items involving research were consistent with the previously expressed position of Council and are detailed in the attached submission in Table 1 (Attachment 5). In broad terms, the draft submission welcomes the intended review by the Panel as a means of achieving a greater scientific understanding of the impacts of mining on water sources.

However, the submission also requests that the Panel specifically investigate and provide advice to the DPE over appropriate means to improve the scientific basis of the assessment process of these impacts at the application stage as well as the review process of these applications. It further requests the Panel review and investigate measures to avoid or minimise impacts, such as appropriate setback distances of mining longwalls to water sources. The submission further states that Guidelines for Proponents preparing Coal Seam Gas and Large Coal Mining Development Proposals produced by the IESC (dated April 2018) is viewed as a suitable standard in relation to these matters.

Term of Reference 2:

Undertake a review of current coal mining in the Greater Sydney Water Catchment Special Areas with a particular focus on risks to the quantity of water available, the environmental consequences for swamps and the issue of cumulative impacts.



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Council should note that this ToR also applies to the Russell Vale Colliery expansion within the Wollondilly LGA given its reference to the Greater Sydney Water Catchment Special Areas. The following provides comments in regard to aspects of this ToR not addressed in regard to ToR 1 above.

i. Risks of mining to upland swamps

The requirement for the Panel to investigate the 'environmental consequences' (of current coal mining) for swamps is welcomed given their high level of sensitivity to impacts associated with underground mining operations by a range of research studies. There is justification for concern over the adequacy of the response by the DPE over this matter given its previous response to similar advice. An example is the significant shortcomings in the Draft Determination for the Russell Vale Colliery expansion regarding this matter identified by the PAC established to investigate this Project during 2015.

In relation to this matter, Council provided a submission on the Integrated Mining Policy in July 2015, which contained a *Policy Framework for Biodiversity Offsets for Upland Swamps and Associated Threatened Species Policy Framework.* This submission expressed opposition to the implementation of the Policy Framework (as exhibited) until such time that Council was in receipt of suitably qualified independent advice that the Policy will not result in adverse outcomes to the values and functions of any upland swamp potentially impacted by underground mining operations. The draft submission to the Panel recommends that it carry out such a review of this Policy framework as part of its investigation and provide advice and recommendations to the DPE.

ii. The issue of cumulative impacts

The requirement for the Panel to investigate improved approaches to 'cumulative impacts' presented to the quantity of drinking water available is also welcomed. However, this fails to allow for the cumulative or specific impacts on water quality. The draft submission consequently recommends that the Panel also undertake a review of the cumulative effects of mining operations on water quality (surface and groundwater) either as part of this ToR or the item enabling "The Panel to provide recommendations about any factors the Panel believes relevant."

Term of Reference 3:

Provide advice as required to the Department of Planning & Environment on mining activities in the Greater Sydney Water Catchment Special Areas



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The ToR document lists documents currently under preparation or that the Panel may provide advice on as part of its investigation. These studies include the Environmental Impact Statement for the Dendrobium Extension Project which, in part, applies to a portion of the Wollondilly LGA. This report recommends that Council request the DPE not issue a Determination for any mining related application until such time it has received and reviewed the final Report by the Independent Expert Panel.

CONSULTATION WITH THE PANEL

Both Terms of Reference 1 and 2 contain a sub item "In developing its advice, the Panel will meet; undertake site visits; seek information and data; and consult as needed." This report recommends requesting the Panel to visit Wollondilly to inspect a section of Redbank Creek identified by a Western Sydney University Study as being potentially impacted by mining operations. The author of this Study has expressed an interest in providing a presentation following its public release in mid-2018. This report further recommends a meeting with members of the Panel, including possibly members of Council's Minerals, Energy Resources, Environment & Waste Advisory Committee to discuss issues raised in Council's submission as well as its broad position on impacts of mining to water sources.

CONCLUSION

This report recommends that Council welcome the establishment of the Independent Expert Panel as a means of achieving current scientific advice over the impacts of mining operations on water sources within the Drinking Catchment. The draft submission outlines issues requested to be reviewed and investigated based on the issued Terms of Reference. These issues are consistent with the previous adopted position of Council and local community regarding the impacts of mining on water sources in general (both quantity of water and as well as water quality).

The report recommends that Council endorse the submission and writing to the Department of Planning & Environment expressing concerns over the scope and aspects of the Terms of Reference for the Panel and that no mining related applications within the Drinking Catchment be approved until it has reviewed the Panel's Final Report.

CONSULTATION

Consultation has occurred with the following during the preparation of this report:

- Staff at Wollongong City Council given the partial location of a number of mining projects in the Wollongong LGA
- Members of Council's Minerals, Energy Resources, Environment & Waste Advisory Committee
- Mapping officers of local mining companies to obtain updated digital mapping layers.



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FINANCIAL IMPLICATIONS

The matter raised in this Report has no financial impact on Council's adopted budget or forward estimates.

ATTACHMENTS INCLUDED IN A SEPARATE BOOKLET

- 1. Location Map of mining operations within the Drinking Water Catchment.
- 2. Terms of Reference for the Independent Expert Panel for Mining in the Catchment.
- 3. Draft submission to the Independent Expert Panel for Mining in the Catchment.
- 4. List of current Council resolutions of relevance to mining.
- 5. Comments and recommended Council response to certain sub-items of Terms of Reference 1.

RECOMMENDATION

- 1. That Council endorse the submission on the Terms of Reference for the Independent Expert Panel for Mining in the Drinking Catchment.
- 2. That Council seek a site visit and meeting with members of the Panel as well as provision of the draft final Report.
- 3. That Council write to the NSW Department of Planning & Environment to:
 - i. Welcome the establishment of the Independent Expert Panel for Mining in the Catchment and its composition.
 - ii. Advise that Council only provides in-principle support to the investigation by the Panel as a result of concerns over aspects of the issued Terms of Reference for the Panel and uncertainty over the adequacy of the response by the NSW Department of Planning & Environment.
 - iii. Requests that no Determinations be issued for any mining related application within the Catchment Area until such time that it has received and reviewed the Final Report produced by the Panel.

