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20 October 2009

Committee Secretary
Senate Standing Committee on Environment, Communications and the Arts
PO Box 6100
Parliament House
CANBERRA ACT 2600

By email: eca.sen@aph.gov.au

Dear Sir / Madam

Inquiry Into The Impacts Of Mining In The Murray-Darling Basin

The NSW Minerals Council (NSWMC) welcomes the opportunity to make this supplementary submission to the Senate Standing Committee on Environment, Communications and the Arts' Inquiry into the impacts of mining in the Murray-Darling Basin (MDB).

We believe that such a submission is necessary to correct some of the information provided in evidence by other parties to the Inquiry, specifically relating to the extent to which the mining industry is covered by the various pieces of legislation governing water, as well as the requirements of existing planning legislation to address water issues as part of project assessment applications.

As stated in our original submission, NSWMC believes that the existing State and Federal regulatory framework more than adequately addresses the concerns that are raised by the Inquiry's Terms of Reference. This framework allows for the evaluation and assessment of potential impacts of mining projects on the environment, including the Murray-Darling Basin and the Namoi Valley. Water Sharing Plans and sustainable yield projects also specifically address the sustainable management of water resources so critical to our major primary industries of mining and agriculture.

Commonwealth Water Act 2007

The object of the *Water Act 2007* is to make provision for the management of the water resources of the Murray-Darling Basin, and to make provision for other matters of national interest in relation to water and water information. Section 255A "*Mitigation of unintended diversions*" makes specific reference to mining in the Murray-Darling Basin:

Prior to licences being granted for subsidence mining operations on floodplains that have underlying groundwater systems forming part of the Murray-Darling system inflows, an independent expert study must be undertaken to determine the impacts of the proposed mining operations on the connectivity of groundwater systems, surface water and groundwater flows and water quality.

National Water Initiative (NWI)

The National Water Commission (NWC) is developing national tools and methodologies to understand and manage the potential local and cumulative effects of mining on groundwater resources. This project is being completed through the \$82 million National Groundwater Action Plan that the NWC is undertaking. Projects to address groundwater knowledge gaps and progress the groundwater reforms agreed to under the NWI are being completed. The project will:

- Develop guidelines for environmental impact assessments that outline both general areas and specific items related to water resources, in particular groundwater, that should be considered during the assessment of mining proposals



- Develop risk-management based tools to assist planners and developers to predict and minimise the cumulative impact of future mining activities on other water users
- Develop guidelines and tools to enable the integrated management and accounting of water resources across multiple mine sites to minimise the impact on water resources. These will be based on an adaptive management framework to enable improved outcomes as knowledge increases.

The project outcomes will:

- Assist jurisdictions to ensure that their land-use planning and environmental impact assessment requirements are NWI compliant
- Ensure that the cumulative impacts of mining operations within a watershed or aquifer system are considered in jurisdictional land-use planning processes
- Enable the local and cumulative impacts on water resources due to mining to be understood, and as far as possible, minimised
- Assist the mining industry to manage and account for water use at individual mine sites and across multiple mine sites
- Apply the tools developed under the project in the assessment of the cumulative impact of mining on water resources in up to four regions.

Phase 1 of the project identified that:

- All jurisdictions consider a range of natural resource and mining attributes in assessing mining impacts on groundwater systems in mining project approvals
- All State Governments have made significant efforts and progress in working towards achieving the objectives and implementation of the principles of the NWI Intergovernmental Agreement
- Improvements have been made in the implementation of stricter requirements for high yielding and highly utilised or stressed aquifers, as well as the inclusion of cumulative effects in the environmental impact assessment process for all jurisdictions
- While there are differences in the approvals frameworks and processes across all jurisdictions, the differences and limitations identified are not considered major impediments to achieving NWI objectives
- Further effort and coordination of mining approvals processes across mining, environment, water and planning legislation is fundamental for implementing, achieving and sustaining NWI objectives
- Effective communication and coordination between agencies involved in planning and approvals is also critical.



Reference: National Water Commission Website

<http://www.nwc.gov.au/www/html/629-potential-local-and-cumulative-impacts-of-mining-on-groundwater-resources.asp?intSiteID=1>

NSW Regulatory Regime, Environmental Assessment and Water

In NSW, the Act has primacy for the assessment and determination of development proposals. Proposals are considered under different parts of the Act, including:

- Part 3A, for major projects of regional or State significance which require an approval from the Minister for Planning
- Part 4, for other proposals which require consent, usually by the local council but by the Minister in limited circumstances. Under Part 4, minor or routine development may also be complying development approved by accredited certifiers
- Part 5 for proposals which do not fall under Part 4 or Part 3A. These are often infrastructure proposals approved by local councils or State agencies which are undertaking them.

The Minister for Planning determines applications for major infrastructure or other major projects of State or regional environmental planning significance under Part 3A of the Act. This section of the Act, which commenced in August 2005, provides a single assessment process specifically designed for major projects and improved transparency and community consultation.

In accordance with the Director General's Environmental Assessment Requirements under Part 3A of the Act for any mine related Project Environmental Assessment, a study must provide the following in relation to water:

- A detailed site water balance
- An assessment of the potential loss of surface and groundwater flows to the environment and other land users
- An assessment of potential water quality impacts on the environment and other land users, including salinity impacts
- A description of final void water management.

A number of key guidelines must also be taken into account in any Water Assessment including:

- National Water Quality Management Strategy: Water quality management – an outline of the policies (Australian and New Zealand Environment and Conservation Council/Agriculture and Resource Management Council of Australia and New Zealand [ANZECC/ARMCANZ])
- National Water Quality Management Strategy: Policies and principles – a reference document (ANZECC/ARMCANZ)
- National Water Quality Management Strategy: Implementation Guidelines (ANZECC/ARMCANZ)
- National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
- State Water Management Outcomes Plan
- NSW Government Water Quality and River Flow Environmental Objectives (NSW Department of Environment, Climate Change and Water [DECCW])
- Managing Urban Stormwater: Soils & Construction (Landcom)
- Managing Urban Stormwater: Treatment Techniques (DECCW)
- Managing Urban Stormwater: Source Control (DECCW)



Two current examples in the Murray-Darling Basin illustrate how thorough the existing environmental approval process is in assessing the impact of new mining proposals on surface and ground water. The Environmental Assessment studies for the Cadia Valley Operations (Newcrest) Cadia East project and the Cowal Gold Mine (Barrick) - E42 Modification project, show the extraordinary level of detail required to meet the legislative requirements:

- **Cadia Valley Operations (Newcrest) – Cadia East Development**

http://www.newcrest.com.au/sus_cadia_east_project_env_Asmnt.asp

- **Lake Cowal Gold Mine (Barrick)**

<http://www.barrick.com/GlobalOperations/AustraliaPacific/Cowal/EnvironmentalAssessment/default.aspx>

Accounting for Water in the Australian Minerals Industry

The minerals industry is a leader in water management in Australia. As a high-value and responsible manager of water resources, the minerals industry strongly supports the development of water accounting frameworks, so that water use by all users in the landscape, can be compared in a quantified and transparent manner. Additionally, the minerals industry sees the development of water accounting as a key facilitating mechanism for the evolution of functional water markets.

In 2007, the minerals industry, led by the Minerals Council of Australia (MCA), began a research and development project on a water accounting framework in conjunction with the Sustainable Minerals Institute at the University of Queensland (SMI).

The water accounting framework is currently being piloted in a partnership between the MCA, SMI and NSWMC at a number of operations in Australia. The results will be collated and a finalised framework developed for use by the minerals industry in Australia. The pilot project is expected to be completed by October-2009, with a subsequent stakeholder engagement program to update industry and other stakeholders following earlier consultation. The objectives of this pilot project are to:

- Map minerals industry water accounting definitions and concepts to the Standards and other documentation previously developed by NWI's Water Accounting Development Committee
- Explore the incorporation of water quality into the accounting framework
- To update and refining the presentation of accounts, based on industry and other stakeholder feedback, and where possible to align with water accounting approaches being developed by the Water Accounting Development Committee
- To provide feedback to government agencies developing water accounting methods on the utility, challenges and opportunities, in the accounting approaches being developed from an industrial water user perspective
- To undertake an accounting exercise across a region of mines to test the refined accounting framework and inform capacity building requirements.

Once again, NSWMC appreciates the opportunity to add to our original submission and to the evidence provided to the Committee. We trust the information contained in this submission clarifies the extent to which the existing State and Commonwealth regulatory framework addresses water related issues with respect to mining.

If you have any questions regarding the issues outlined in this submission, please contact Sue-Ern Tan, General Manager, Policy and Strategy on 9274 1416.

Yours sincerely



Dr Nicole B. Williams
CHIEF EXECUTIVE OFFICER

