



Office of  
Environment  
& Heritage

Date 29/08/2014  
Our reference DOC14/185060  
Contact: James Dawson 4224 4125

Mr Dennis Zines  
Kadenz Pty Ltd Environmental Consultancy  
1 Fairweather Street,  
BELLEVUE HILL NSW 2023

Dear Dennis,

**RE: 4<sup>th</sup> Triennial Independent Environmental Audit of Dendrobium Approvals Compliance**

The Office of Environment and Heritage (OEH) has taken considerable interest in the Dendrobium Coal Mine due to requirements that the proponent consults with OEH on a range of approval conditions. The mine has impacts on sensitive ecological communities, including threatened species and their habitats, and high conservation and biodiversity values occur above the mine.

OEH considers that BHP Billiton Illawarra Coal is currently in breach of the Dendrobium 3B SMP Approval. A recent impact report regarding swamps 1a and 1b in Area 3B documented groundwater loss consistent with fracturing of swamp bedrock at all undermined piezometers. This represents an impact greater than the "minor environmental consequences" in relation to ecosystem functionality permitted under the project approval. This matter was raised with Department of Planning and Environment (DPE) and BHP Billiton Illawarra Coal by correspondence dated 9/7/14. As yet, there has been no response from either party about this matter.

In undertaking the Triennial Independent Environmental Audit OEH also highlights the following issues.

Condition	Issue/Comment
Condition 6, Schedule 3 Area 3B SMP Approval	<b>Biodiversity Offset Strategy</b> The condition is <u>not yet satisfied</u> . OEH is assessing the latest draft strategy but considers there are significant outstanding issues before it will meet the requirements of this condition. OEH also notes that the company has already had four time extensions on this condition, with mining having commenced over 18 months ago.
Condition 9, Schedule 3 Area 3B SMP Approval	<b>Performance Measures for Area 3B</b> OEH considers that BHPBIC is <u>in breach of this condition</u> in relation to ecosystem function of swamps 1a, 1b and 5. See correspondence dated 9/7/14 for further information. OEH considers that predicted impacts to Donalds Castle Creek exceed the "minor impacts" under this condition. OEH considers that the hydrological model used by BHPBIC to assess reductions in the quantity of water reporting to the reservoir or leaking to underground mine working to be inappropriate, inadequate and unproven for this use. Multiple independent peer reviews have come to this conclusion.
Condition 11, Schedule 3 SMP Approval	<b>Watercourse Impact Monitoring, Management and Contingency Plan</b> This condition is <u>not yet satisfied</u> . The intention of the approval was to ensure that monitoring and management plans were in place prior to mining so that

<p>and</p> <p>Condition 6 Schedule 3 Development Consent</p>	<p>the impacts of mining could be adequately assessed and to ensure mining was undertaken in accordance with the performance measures. The draft of this plan is still considered inadequate by OEH and the SCA, despite mining having commenced 18 months ago.</p> <p>OEH does not consider that the latest drafts provided fulfil the requirements of the approval in that the monitoring plan identified is not capable of assessing whether the performance measures identified in Condition 9 Schedule 3 of the SMP Approval are achieved.</p>
<p>Condition 12, Schedule 3 SMP Approval</p> <p>and</p> <p>Condition 6 Schedule 3 Development Consent</p>	<p><b>Swamp Impact Monitoring, management and Contingency Plan</b></p> <p>This condition is <u>not yet satisfied</u>. The intention of the approval was to ensure that monitoring and management plans were in place prior to mining so that the impacts of mining could be adequately assessed and to ensure mining was undertaken in accordance with the performance measures. The draft of this plan is still considered inadequate by OEH and the SCA, despite mining having commenced 18 months ago.</p> <p>OEH does not consider that the latest drafts provided fulfil the requirements of the approval in that the monitoring plan identified is not capable of assessing whether the performance measures identified in Condition 9 Schedule 3 of the SMP Approval are achieved.</p>
<p>Condition 11 and 12 Schedule 3 SMP Approval</p> <p>and</p> <p>Condition 6, Schedule 3 Development Consent</p>	<p><b>Trigger Action Response Plans</b></p> <p>OEH is <u>not satisfied</u> with the Trigger Action Response Plans (TARPS) included in the Swamp and Water Impact, Monitoring, Management and Contingency Plans. The TARPs are intended to assist monitoring and management of the mine by identifying environmental triggers and appropriate actions to undertake.</p> <p>OEH considers that the TARPs should be strongly linked to the monitoring undertaken and the Performance Measures specified in the Approval. Clear, quantifiable triggers and definitions should be used. In addition the TARP should clearly identify when the performance measures have been exceeded. Often impacts in Impact Reports are assessed against the TARP and no consideration of the limits of the approval is included.</p>
<p>Condition 13 Schedule 3 SMP Approval</p>	<p><b>Groundwater Model</b></p> <p><u>Status unknown</u>. OEH considers that the hydrological model used by BHPBIC to assess reductions in the quantity of water reporting to the reservoir or leaking to underground mine working to be inappropriate, inadequate and unproven for this use. Multiple independent peer reviews have come to this conclusion.</p> <p>Whether this model has been approved to the satisfaction of the Director-General is not known.</p>
<p>Condition 15 Schedule 3 SMP Approval</p>	<p><b>Swamp Rehabilitation Research Program</b></p> <p>This condition is <u>not yet satisfied</u>, despite mining having commenced 18 months ago. OEH has provided advice on three occasions and still considers that the Program does not meet the requirements of the Approval. In particular it attempts to include a monitoring program that is the requirement of an entirely separate condition of approval (Condition 14, SMP Approval).</p>
<p>Condition 14 Schedule 3 Development Consent</p>	<p><b>Environmental Offsets</b></p> <p><u>Status unknown</u>. OEH is not aware of any offset for loss of water quality or quantity to SCA storages despite loss being reported.</p>
<p>Condition 12 Schedule 8 Development Consent</p>	<p><b>Access to Information</b></p> <p>BHP is <u>in breach of this condition</u>. A comprehensive, running summary of monitoring results required under these consent is required on BHPBIC's website. The most recent documents with any relation to the environment on its website are an Annual Environmental Management Report for July 2012 to June 2013 and an End of Panel report for Longwall 8 from May 2012. OEH does not consider that this fulfils this requirement.</p> <p>OEH recommends that all impact reports required under the consent on monitoring/management programs are included on the website.</p>
<p>A number of conditions in Development Consent and SMP Approval</p>	<p><b>Lack of meaningful consultation</b></p> <p>OEH has been disappointed with the extent of consultation by BHPBIC in developing a number of post approval plans that required consultation with OEH. DPE have stated to BHP that they require "meaningful consultation" with the agencies involved. OEH has provided clear and consistent advice over the course of up to 20 months on some plans such as the Swamp Impact</p>

	<p>Monitoring, Management and Contingency Plan.</p> <p>Generally OEH advice and comments have not been incorporated into revised drafts, nor addressed in any manner.</p> <p><b>Lengthy delays in fulfilling approval requirements</b></p> <p>OEH notes that timeframes specified in the relevant approvals have frequently been exceeded and that extensions appear to be freely granted. OEH believes there should be an expectation that timeframes are met unless exceptional circumstances apply.</p> <p>In some cases extensions granted for plans that were supposed to be in place prior to mining has resulted in only draft plans being in place when mining commenced. These draft plans have not been considered satisfactory by OEH, SCA and DPE.</p>
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More detailed information can be derived from the attached correspondence OEH has formerly provided to BHPBIC, DP&E and DRE.

If you would like to discuss the matters raised, please contact James Dawson (Senior Team Leader, Ecosystems and Threatened Species) on [james.dawson@environment.nsw.gov.au](mailto:james.dawson@environment.nsw.gov.au) or 4224 4125.

Yours sincerely,



**Gabrielle Pietrini**  
**A/Regional Manager, Illawarra**  
**Regional Operations Group, South Branch**  
**Office of Environment and Heritage**

Cc: Greg Kininmonth, DRE  
Cc: Howard Reed, DP&I

