



DENDROBIUM AREA 3B LONGWALL 17 SUBSIDENCE MANAGEMENT PLAN Reasons for Approval

In granting a conditional approval of South32 Illawarra Coal's Longwall 17 Subsidence Management Plan (SMP) application, I have carefully considered the following:

1. DEVELOPMENT CONSENT STATUS

- The Dendrobium mine was approved following a Commission of Inquiry in 2001 and was subsequently modified by the then Minister for Planning in December 2008. The 2008 modification significantly reduced the potential water impacts of the approved mine by removing longwall mining from under large sections of Wongawilli Creek and Sandy Creek.
- The existing development consent expressly allows longwall mining in Areas 1, 2, 3A, 3B and 3C. Longwall mining has already occurred in Areas 1, 2, 3A and part of Area 3B.
- While the mining in Area 3B (including the area covered by Longwall 17) is already approved, the development consent requires a Subsidence Management Plan (SMP) to be approved before any longwall mining occurs in each Area.
- SMPs may cover a group of longwalls, or in this case a single longwall (ie Longwall 17). Each SMP is prepared in consultation with relevant NSW Government agencies.
- The SMP, including performance measures and monitoring requirements, provides a framework to avoid, minimise and mitigate subsidence impacts and maintains a robust adaptive management framework.
- The preparation of a SMP allows the assessment of impacts on all built and natural features to be focused at the local level, ensuring that impacts are appropriately monitored, and impact management regimes are further refined during the life of the project in response to the results of subsidence monitoring and recorded impacts.
- The consent expressly notes that the Secretary may "*impose conditions containing subsidence impact limits, subsidence management mechanisms or other conditions*" (condition 8 of Schedule 3).

2. CONSULTATION

- The Department consulted over this SMP application with WaterNSW, the Dams Safety Committee (DSC), the Office of Environment and Heritage (OEH), the Division of Resources and Geosciences (DRG), the Department of Industry (including the Natural Resource Access Regulator), Subsidence Advisory NSW and the Resources Regulator.
- South32 subsequently provided a response to the issues raised by agencies on 31 May 2019, which was forwarded again to relevant Government agencies for further comment.
- Residual comments were received from OEH and WaterNSW. WaterNSW provided several recommendations in the event the SMP for Longwall 17 is approved. Where relevant and appropriate these recommendations have been adopted by the Department (see Recommended Conditions).
- DSC advised that its previous comments had been adequately addressed. However, the Department notes that South32 is still required to obtain a separate approval from DSC under the *Dams Safety Act 2015*, as parts of Longwall 17 are located in the Lake Avon notification area.
- The Department has also held meetings with South32, the Dendrobium Community Consultative Committee and WaterNSW.
- WaterNSW and DSC were given the opportunity to review the conditions of the SMP approval before the decision was made. Comments were received on 10 July 2019 from both agencies and taken into consideration in finalising the conditions.

3. INDEPENDENT EXPERT PANEL CONSIDERATIONS

- In early 2018, the NSW Government established this independent expert panel to assist in providing advice to the Department and other government agencies.
- The Panel's key functions are to:
 - undertake an initial review of current mining in the catchment;
 - review and update the findings of the 2008 Southern Coalfield Inquiry; and
 - strengthen the assessment of the ongoing operation of approved mines and any applications for new mining within the Special Areas of the catchment by providing advice.
- In accordance with its terms of reference, the Independent Expert Panel on Mining in the Catchment (the Panel) has provided advice to the Department on this SMP application.
- In its advice, the Panel suggested that a range of additional information should be considered and/or clarification should be provided on several matters including comments made by WaterNSW in its original submission, the status of existing SMP condition requirements, detailed geological or geotechnical assessment of the significance of the geological structures such as faults and lineaments and queried several matters in relation to the risk assessment provided.
- South32 provided a comprehensive response to these matters, along with the matters raised by other NSW Government agencies on 31 May 2019.
- The Department has carefully reviewed South32's response and considers that it has adequately addressed the concerns raised by the Panel and government agencies.

4. RECOMMENDED CONDITIONS

- The development consent and previous SMP approvals have established a strict regulatory framework, including stringent performance measures, and comprehensive monitoring requirements.
- The Department has taken this opportunity to integrate the three existing SMP approval (ie Longwalls 9-13 SMP, Longwalls 14-15 SMP and Longwall 16 SMP approvals) into a consolidated approval to ensure regulatory certainty and clarity for South32 and other stakeholders.
- All the key provisions of the three existing SMP approvals have been carried forward into the new SMP approval, which has been divided into two key schedules. The first of these applies to ALL longwalls in Area 3B and the second only applies to specific longwalls.
- South32 has proposed to shorten Longwall 17 to provide for a setback of 300 metres from the full supply level of Lake Avon, which is in line with previous approvals from DSC to ensure the integrity of Lake Avon. The Department has formalised the proposed setback by including a condition to this effect, noting that the DSC is entitled under the *Dams Safety Act 2015* to enforce further setbacks to protect the integrity of Lake Avon at any time.
- In addition, the Department has taken into consideration the advice from the Panel and government agencies in relation to additional requirements to avoid or limit impacts, including:
 - an additional 200 metre setback from the centreline of Wongawilli Creek (i.e. from 400 to 600 metres) unless South32 can demonstrate the relevant watercourse performance measure for Wongawilli Creek has not been exceeded by longwall extraction and would not be exceeded by extraction of Longwall 17, and it has a detailed Trigger Action Response Plan approved and in place;
 - offsetting any loss of surface water that may have otherwise reported to the Lake Avon reservoir as a result of the extraction of Longwall 17; and
 - additional investigations examining geological structures near bore S2435 and further characterisation of the Elouera Fault to inform decision-making by relevant government regulators regarding future proposed longwalls.
- The Department notes that the proposed requirement to offset potential surface water losses is consistent with the existing consent, which requires South32 to "*provide suitable offsets for loss of water quality or loss of water flows to WaterNSW storages*". A transfer of 33 hectares of land to WaterNSW occurred under this condition in 2010.
- The Department also notes that the requirement for an additional offset does not indicate that there has been any breach of the relevant performance measure. Rather it recognises that South32 should be required to offset or compensate WaterNSW for the potential loss of surface water that would have otherwise reported to WaterNSW storages as a result of Longwall 17.

5. ONGOING MANAGEMENT

- The Department considers that the additional conditions to be imposed through the SMP approval provide effective safeguards against any significant impacts as a result of the extraction of Longwall 17 beyond those already approved and would also provide additional information to inform decision-making about any future mining at the Dendrobium Coal Mine.


- This SMP approval continues the Department's precautionary approach by enforcing substantial setbacks from key features (ie Lake Avon and Wongawilli Creek) in accordance with advice from relevant government agencies including WaterNSW and the DSC.
- Further approval will be required before any mining can occur in Longwall 18, following consultation with relevant Government agencies.
- The Department also has a role under the *Environmental Planning and Assessment Act 1979* (EP&A Act) to ensure compliance with the existing development consent and subsequent approvals under the consent.
- In undertaking this role, the Department has a range of enforcement powers available to it if it considers that there may have been or may potentially be a breach of the development consent or subsequent approvals under the consent, including but not limited to, requiring further setbacks from key features or the cessation of mining operations if considered necessary.

6. OTHER FACTORS

- The Dendrobium mine remains a significant contributor to regional employment in the Illawarra, with around 400 people working at the mine, and a further 600 people indirectly reliant on the mine.
- The coal extracted from the mine is a key component in the production of a premium coal blend that is used in steel production at the Bluescope Steelworks in Port Kembla, which employs 3,000 people.
- The remaining coal in Area 3B at Dendrobium is estimated to provide up to \$200 million in State Government revenue through royalties, levies and payroll tax.

7. EVALUATION

- The Department has assessed the SMP application in accordance with the relevant requirements of the approved consent and has carefully considered the potential impacts of the extraction of Longwall 17 on the surrounding environment.
- Extraction of Longwall 17 would allow the recovery of valuable coal resources, using existing infrastructure and without increasing the disturbance footprint of the approved project (ie longwall mining is already approved in Area 3B).
- As detailed above, the extraction of Longwall 17 would continue to provide wide ranging benefits for the local and State economies.
- On balance, the Department considers that the SMP application is in the public interest and should be approved, subject to strict conditions as detailed above.



Mike Young
A/Executive Director
Energy & Resources
as nominee of the Secretary

11/7/19