

The Manager
Tahmoor Colliery
Tahmoor Coal Pty Ltd
PO BOX 100
TAHMOOR NSW 2573

Attention: Andrew Reid

22 September 2017

Dear Andrew

Subject: Subsidence Management Plan Approval for Tahmoor Colliery Longwall 31, Condition 13, Shallow Groundwater Hydrological Investigation and Monitoring Plan – Stage 1.

Our ref: OUT17/39317

I refer to your Letter dated 22 September 2017 regarding the LW31 Subsidence Management Plan (SMP) Condition 13 Shallow Groundwater Hydrological Investigation and Monitoring Plan (SGHIMP) Stage 1 approval. With reference to that letter:

- The attached 'Longwall 31 Shallow Groundwater Hydrological Investigation Scope' document describes the proposed monitoring locations and scope recommended by Geoterra Pty Ltd in Stage 1.
- The attached 'Longwall 31 SMP Approval Condition 13 Proposed Modification' letter dated 28 August 2017 provides the justification for the monitoring plans.
   Stage 2 will be submitted following the completion of Stage 1. This will enable the ground characterisation information collected in Stage 1 to inform Stage 2 of the Investigation and Monitoring Plan.

The Department is satisfied that the proposed scope and monitoring plans as outlined in the above documents adequately address the intent of this condition.

Approval of the SGHIMP is required to satisfy Condition 13 of the Tahmoor Colliery Longwall 31 SMP approval, issued by this Department on 3 May 2017 - Department reference OUT17/16896 (letter) and INT17/57494 (SMP Approval).

Specifically, Condition 13 requires that prior to the undermining of Redbank Creek by LW31 the titleholder shall seek the approval of Director ESU, and execute to the satisfaction of the Department, a shallow groundwater hydrological investigation and monitoring plan within the LW 31 impact zone.

Pursuant to Condition 13 of the SMP approval dated 3 May 2017, the SGHIMP is approved, subject to the following conditions:

## Conditions.

- Stage 1 of the Shallow Groundwater Hydrological Investigation and Monitoring Plan approves the locations and monitoring installation requirements within the bores.
- The Department requests that the Stage 2 submission addresses all requirements of LW31 SMP Approval Condition 13 which are not covered in the Stage 1 submission, including the following aspects:
  - Characterise pre-mining lithology and fracture networks in the shallow aquifers down to 50m below creek level.
  - If damaged during mining, a new bore(s) is to be drilled to re-instate groundwater monitoring piezometers following mining.
  - Use pre-mining and post-mining shallow groundwater data to inform rehabilitation plans, objectives and completion criteria.
  - Submit pre-mining and post-mining monitoring data and modelling results of the shallow groundwater hydrological investigation and monitoring plan in the End of Panel Report.

If you require further information please contact me on (02) 4931 6601.

Yours sincerely

Dr David Blackmore

Director, Environmental Sustainability Unit Division of Resources and Geoscience Department of Planning and Environment