

Ms Sophie Butcher
Mining Projects
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Ms Butcher

**Abel Coal Project Modification (05_0136 Mod 3)
Environmental Assessment Review**

I refer to your email of 21 February 2013 regarding the Donaldson Coal Pty Limited application to modify the consent for the Abel Coal Mine to introduce longwall and shortwall mining methods at the Abel Underground Mine and to extend the life of the mine to 2029.

NSW Trade & Investment, Regional Infrastructure & Services, Division of Resources & Energy (DRE) has reviewed the *Abel Upgrade Modification Environmental Assessment* (EA) and provides the following comments which are directed at specific areas of DRE responsibility for this proposal.

MINING TITLE

As coal is a prescribed mineral under the *Mining Act 1992*, the proponent is required to hold appropriate mining titles from DRE in order to mine this mineral. DRE understand that this project is within existing mining leases held by Donaldson Coal Pty Limited.

Under the *Mining Act 1992*, mining and rehabilitation are regulated by conditions included in the mining lease, including requirements for the submission of a Mining Operations Plan (MOP) and a Subsidence Management Plan (SMP) prior to the commencement of operations, and subsequent Annual Environmental Management Reports (AEMR).

SUBSIDENCE

The existing Abel Mine approval allows mining in two seams, the Lower Donaldson and Upper Donaldson, in mutually exclusive areas.

This current proposed modification proposes multi-seam mining, in both the Lower Donaldson Seam and Upper Donaldson Seam in the same areas. As the two seams are separated by approximately 15m of interburden DRE considers that it is highly likely the workings will interact where mining in both seams is proposed, including where first workings only take place. The EA does not include a specific geotechnical engineering assessment of the potential interaction between the relevant proposed workings in the two seams.

No subsidence assessment has been conducted by the proponent for areas of proposed multi-seam mining, i.e. where mining is proposed in the Upper Donaldson Seam over previously approved bord and pillar mining in the Lower Donaldson Seam even though these mining areas are clearly noted as part of the proposed modification in the main report of the EA.

DRE considers that the proponent's current subsidence assessment does not give adequate consideration to the potential for irregular subsidence and for pillar run leading to subsidence outside the angle of draw in areas where old bord and pillar workings are present in the Borehole Seam (i.e. propagation of instability of old bord and pillar workings beyond the normal subsidence limit above the proposed mining).

There is considerable uncertainty in relation to the current condition of old bord and pillar workings in the Borehole Seam including the accuracy of official records and plans of the workings.

In relation to old bord and pillar workings, DRE's input into the Director General Requirements (DGRs) dated 14 February 2012 specifically recommended the assessment and investigation of such workings in relation to any identified significant surface features. No assessment and investigation of old pillar workings has been undertaken for the EA, however DRE note that the subsidence consultant's report in the EA recommends that this should be done.

Key Risks

1. Principal Residences

The proposed methodology for managing subsidence impacts to Principal Residences as defined in the EA may not be effective in areas of multi-seam mining, particularly where there is a risk of pillar run within the old bord and pillar workings. As discussed above, the conditions of the old bord and pillar workings are currently unclear.

Where significant surface features, such as Principal Residences, are identified over areas of multi-seam mining, particularly old bord and pillar mine workings, DRE recommend the Proponent be required to:-

- Undertake site specific investigations of identified old workings to assess the potential for irregular subsidence movements and pillar-run, i.e. propagation of instability of old bord and pillar workings beyond the normal subsidence limit, and
- Assess the feasibility of the proposed mine layout in relation to multi-seam subsidence effects.

2. High Voltage Transmission Towers

The proposed methodology as outlined in the EA for managing subsidence impacts is considered unlikely to be effective in managing subsidence impacts to the high voltage transmission line due to presence of angle towers in sections of the line.

Three angle towers have been identified within the project as being at risk from subsidence impacts:-


- One subject to potential multi-seam subsidence due to proposed mining in the both the Upper and Lower Donaldson Seams;
- A second tower is situated over proposed single seam bord and pillar workings in the Upper Donaldson Seam;
- A third tower is subject to potential multi-seam subsidence due to proposed mining in the Upper Donaldson Seam and possible interaction with old bord and pillar workings in the Borehole Seam.

There are no established methods for managing subsidence impacts to angle towers other than implementing coal barriers for protection of the towers in question.

DRE recommend the Proponent be required to assess the feasibility of the proposed mine plan in relation to potential subsidence impacts to high voltage transmission line angle towers.

Should you have any enquires regarding this matter please contact Julie Moloney, Principal Adviser, Industry Coordination on (02) 4931 6549.

Yours sincerely



Adrian Delany
Acting Director, Industry Coordination

19.4.13