



## Department of Primary Industries

OUT16/42016

Mr Paul Freeman  
Resource Assessments  
NSW Department of Planning and Environment  
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SYDNEY NSW 2001

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Dear Mr Freeman

### **DPI response to request for comment on proposed Modification to Invincible Coal Mine (MP 07\_0127 MOD 5)**

I refer to your email of 23 September 2016 to the Department of Primary Industries (DPI) in respect to the above matter. Comment has been sought from relevant divisions of DPI. Views were also sought from NSW Department of Industry - Lands that are now a division of the broader Department and no longer within NSW DPI. Any further referrals to DPI can be sent by email to [landuse.enquiries@dpi.nsw.gov.au](mailto:landuse.enquiries@dpi.nsw.gov.au).

DPI has reviewed the application and provides the following comments and recommendations:

- The proponent should consult with the Department of Industry – Lands regarding possible synergies in bush fire management between the Invincible Coal Mine Biodiversity Offset Area and adjacent Crown land Lot 7314 DP 1142023.
- The existing and proposed surface water management should be reviewed to achieve the objective of separating clean and dirty water runoff as set out in the previous project approval and water management plan for the Invincible mine.
- The proponent should quantify existing and proposed water take from each surface and groundwater source and how this is managed at the site in terms of storage, transfer and use. This is to enable further advice to be provided on licensing requirements and for assessment of potential impacts. The current water balance is limited to concepts.
- The proponent should provide further detail of the water balance for the existing Ivanhoe No.2 accumulated water with respect to the 2,121ML requiring dewatering. It is reported in the EA that the mine void is primarily made up of surface water flow through subsidence fractures, but this is calculated in the EA to be 7-20ML/yr which would total a potential maximum of 200ML over a 10 year period.
- The Turon Crudine River Water Source and the Sydney Basin Murray Darling Basin Groundwater Source have limited available entitlement for purchase. This should be considered in further detail by the proponent for any entitlement requirements prior to project approval.

- The proponent should provide further detail of the applicability of Maximum Harvestable Rights Dam Capacity to the dams and proposed licensing for the site.
- The proponent should verify groundwater level and water quality for aquifers potentially impacted. This will aid in quantifying potential dewatering requirements and enable assessment of likely storage and discharge requirements.
- The proponent should clarify whether the flood assessment has considered the proposed discharge of water from the underground workings.
- The proponent should assess whether the proposed discharge for potentially 93 days in 1 year at 22.8ML/d (26% bankfull flow) will impact the downstream riparian environment. The proponent should consider the need for monitoring and mitigating measures or alternate flow release regimes if necessary.
- The proponent should clarify the potential impacts to Baal Bone Colliery operations due to the potential increase in seepage into their workings. The proponent should consult with the Baal Bone Colliery operators.
- The proponent should provide detail on how potentially acid forming material is to be managed to mitigate impact to surface and groundwater sources.
- In the event approval is granted for the modification the proponent should:
  - Develop a groundwater monitoring plan in consultation with DPI Water for the monitoring and management of groundwater associated with the Invincible spoil material, Invincible Underground, Ivanhoe No.2 underground, depressurisation of the coal seam aquifers, and water quality management, as outlined in Section 8.0 of Appendix 5 of the EA. This should include the installation of water level loggers in all bores.
  - Update the existing Water Management Plan in consultation with DPI Water. Including development of an adequate Trigger Action and Response Plan.
  - Ensure development of a stabilised surface water management system in the final landform, consistent with the DPI Water [Guidelines for Controlled Activities on Waterfront Land](#).
  - Install automatic measuring devices at all monitoring bores.

Yours sincerely



Mitchell Isaacs  
**Director, Planning Policy & Assessment Advice**  
 7 November 2016

*DPI appreciates your help to improve our advice to you. Please complete this three minute survey about the advice we have provided to you, here:*

<https://goo.gl/o8TXWz>