



31 OCT 2013

OUT13/32370

Mr Paul Freeman
Mining Projects
NSW Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Paul.Freeman@planning.nsw.gov.au

Dear Mr Freeman,

**Rocky Hill Coal Project (SSD 5156)
Response to exhibition of Environmental Impact Statement**

I refer to your email dated 23 August 2013 requesting advice from the Department of Primary Industries (DPI) in respect to the above matter.

Comment by Fisheries NSW

Fisheries NSW is responsible for ensuring that fish stocks are conserved and that there is no net loss of key fish habitats upon which they depend. To achieve this, Fisheries NSW ensures that developments comply with the requirements of the *Fisheries Management Act 1994* (namely the aquatic habitat protection and threatened species provisions in Parts 7 and 7A of the Act, respectively), and the associated *Policy and Guidelines for Fish Habitat Conservation and Management (2013)*. In addition, NSW DPI is responsible for ensuring the sustainable management of commercial and recreational fishing in NSW.

Overall Fisheries NSW is satisfied that there will be minimal direct impact on Key Fish Habitats in the area. However, Fisheries NSW have concerns about the management of water with this project due to the sensitivity of the downstream waterways as important recreational fishing waters.

Fisheries NSW recommends that DP&I include the following as a condition of consent should the project be approved:

- The discharge of saline mine water from the site must be managed to ensure the salinities in the receiving waters are not elevated. Similar to the Hunter Salinity Trading Scheme, discharge of excess saline water should only occur during high flow events in the receiving waters and only be discharged if the volumes discharged do not increase salinity by more than a minimal amount.

For further information please contact Scott Carter, Senior Conservation Manager, (Port Stephens Office) on 4916 3931, or at scott.carter@dpi.nsw.gov.au.

Comment by NSW Office of Water

NSW Office of Water provide detailed comments and recommendations in attachment A and general licensing requirements in Attachment B.

For further information please contact Rohan Macdonald, Water Regulation Officer, Major Projects (Newcastle Office) on 4904 2642 or at rohan.macdonald@water.nsw.gov.au.

Comment by Office of Agricultural Sustainability and Food Security

In accordance with arrangements for mining proposals that affect agricultural land, the Office of Agricultural Sustainability and Food Security will respond separately to your Department.

For further information please contact Robert Williamson, Leader Regional Services (Orange office) on 6391 3166, or at: robert.williamson@dpi.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Tony Heffernan', with a stylized flourish at the end.

Tony Heffernan
A/Executive Director Business Services

Attachment A

Rocky Hill Coal Project (SSD 5156) Response to exhibition of Environmental Impact Statement Additional comments by NSW Office of Water

Groundwater assessment

The Office of Water is satisfied that the groundwater assessment prepared for the proposal is satisfactory and that the proposed groundwater monitoring and reporting strategies are commensurate with the risk associated with the project. Detailed comments regarding groundwater licensing requirements and aquifer impact assessment are provided below.

Groundwater licensing

As identified in the groundwater assessment, the groundwater licensing requirements associated with the proposal are as follows:

- 91 ML/y maximum (55 ML/y) from the Avon River Water Source under the Water Sharing Plan for the Lower North Coast Unregulated and Alluvial Water Sources to offset the reduction in discharge from Permian to alluvial aquifers.
- 1250 ML/y under part 5 of the *Water Act 1912* to account for peak groundwater inflows to open cut pits from the hard rock aquifers (North Coast Porous and Fractured Rock Aquifer).

The proponent currently holds 267 unit shares of entitlement within the Avon Water Source, sufficient to offset the peak loss of 91 ML/y from the alluvium as required under the Aquifer Interference Policy.

The proponent will need to apply for appropriate licences under the *Water Act 1912* to account for the maximum predicted take of 1250 ML/y from the hard rock aquifers.

Aquifer impacts

Groundwater productivity

The Waukivory Creek and Avon River Alluvium form part of the Avon River Water Source which the Office of Water has classified as "highly productive". The proponent has classified the aquifer as "less productive" based on groundwater quality data adjacent to the site. Although this is based on reasonable grounds, under the Aquifer Interference Policy the classification is performed at the water source scale rather than on a site by site basis. The misclassification does not change the outcome of the Aquifer Interference Policy minimal impact considerations assessment. The Permian coal measures have been correctly classified as "less productive".

Assessment against Minimal Impact Considerations

The proposal has been assessed against the Minimal Impact Considerations of the Aquifer Interference Policy. The impacts fall within the level 1 threshold for all criteria with the exception of the encroachment of the south-west corner of the Main Pit to within 200 m of the high bank of Waukivory Creek. The Aquifer Interference Policy states that if this criterion is not met then appropriate studies are required to demonstrate that:

- there will be negligible river bank or high wall instability risks;
- during the activity's operation and post-closure, levee banks and landform design should prevent the Probable Maximum Flood from entering the activity's site; and
- low-permeability barriers between the site and the highly connected surface water source will be appropriately designed, installed and maintained to ensure their long-term effectiveness at minimising interaction between saline groundwater and the highly connected surface water supply.

The proponent acknowledges that the project involves the excavation of an open cut pit within 200m of the high bank of Waukivory Creek and in this regard it falls into level 2 of the minimal impact considerations. However, the proponent is of the view that the groundwater assessment demonstrates that regardless of this activity the groundwater resources within and adjacent to the site are not impacted to an extent that would require mitigation. As such, a low permeability barrier wall (LPB) as recommended in the Aquifer Interference Policy when the 200m setback limit can not be achieved has not been embraced.

The omission of the LPB carries an element of risk that the post mining backfill placed adjacent to Quaternary alluvium may result in groundwater of a lower beneficial use discharging into the alluvium along this section. The proponent has argued that such a risk is minimal and there is in fact likely to be a small improvement in water quality, based on a higher rainfall recharge rate into the mine spoil and the blended mix of backfilled overburden and mine rejects.

The proponent's arguments against the need for an LPB for the project are considered reasonable. Given this and the proposed monitoring and response measures, the Office of Water considers an LPB is not required.

With respect to flood protection, the project has been designed with a levee/visibility barrier to the south and west of the open cut pits. The EIS states that the crest of the levee will be set above the 1 in 1000 annual exceedance probability (AEP) design flood event. No open voids are proposed for the final landform.

Given the limited duration of the encroachment by the open cut the proposed levee is considered adequate for flood protection for the project.

The EIS does not address the risk of potential river bank or high wall instability due to the encroachment of the pits into the 200 m setback.

Surface water assessment

Surface water licensing

The proposal has been designed with the aim of separating surface water into clean, dirty (sediment laden) and saline water management streams. Clean surface runoff is to be diverted around disturbance areas, with no take proposed. The project water supply is primarily proposed to be drawn from the saline water management stream. Take of water from the three environmental dams proposed for the management of saline water would be considered exempt from licensing requirements under the exemption provisions of the current Harvestable Rights Order (gazetted 31 March 2006) and the excluded works provisions of the *Water Management (General) Regulation 2011*.

In the event of a water supply shortfall the proponents intend to extract water from the dirty water dams to augment supply from the saline management system. This take may also be considered exempt under the exemption provisions, however any proposals for such take should be discussed with the Office of Water to determine any licensing requirements prior to the take occurring.

The proponents may also extract water from adjacent reaches of Waukivory Creek or the Avon River. The proponents currently hold Water Access Licences with 267 unit shares of entitlement in the Avon River water source, a proportion of which is proposed to be assigned to account for impacts from groundwater drawdown. Any such extraction should not exceed the available allocation for the licences as determined from time to time (including any assignments for groundwater accounting), should be in accordance with the rules of the Water Sharing Plan and should be taken from water supply work(s) nominated on the relevant access licence(s).

Recommendations

- Appropriate studies should be presented to demonstrate there will be negligible river bank or high wall instability risks due to the encroachment of the open cut pit into the 200 m setback from Waukivory Creek.
- All water take is to be appropriately authorised prior to the take occurring. The proponents should consult with the Office of Water prior to any take proposed under the exemption provisions of the Harvestable Rights Order and the *Water Management (General) Regulation 2011*.
- The proponent's Statement of Commitments should be incorporated into any Conditions of Approval.
- The proposed Water Management Plan should be prepared in consultation with the Office of Water and should incorporate surface and groundwater monitoring programs, impact trigger definition and response/contingency measures for all water sources potentially impacted by the project.

End Attachment A

General licensing requirements

Licences under the *Water Act 1912 (WA)*

Licences required for all bores under Part 5 of the WA (as defined under s105 of WA).

Monitoring bores may require licensing under Part 5 of the Water Act 1912 unless the bores meet the criteria for exempt monitoring bores as defined in the Water Management (General) Regulation 2011.

Flood control works require licensing under Part 8 of the Water Act 1912.

Application forms for licences and approvals are available on the intranet at

<http://www.water.nsw.gov.au/Water-licensing/Applications-and-fees/Applications/default.aspx>

Licences under the *Water Management Act 2000 (WMA)*

- Access Licence nominated to a water supply work is required to take from any water source managed under the WMA. (Relevant water source: Avon River Water Source of the Water Sharing Plan for the Lower North Coast Unregulated and Alluvial Water Sources (WSP).
- Exemptions for access licences are provided in Clause 18 and the Schedule 5 of the *Water Management (General) Regulation 2011*.
<http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+469+2011+cd+0+N>
- Section 54 of the WMA provides details on harvestable rights.
- Requirements for access licence dealings are provided in the following documents:
 - Section 71 of WMA
 - Access Licence Dealing Principles
<http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+433+2004+cd+0+N>
 - Part 12 of the Water Sharing Plan
<http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+348+2009+cd+0+N>

Application forms for access licence and access licence dealings are available on the intranet at
<http://www.water.nsw.gov.au/Water-licensing/Applications-and-fees/Applications/default.aspx>

End Attachment B

End Attachment A