

From: [Tony Dwyer](#)
To: [Philip Nevill](#)
Cc: [Steve O'Donoghue](#)
Subject: RE: Tarrawonga Mod 7 - RFI
Date: Thursday, 17 December 2020 12:33:09 PM
Attachments: [image001.png](#)

Hi Philip,

Further to our earlier conversation, on behalf of TCPL please see below the following responses to your queries:

- **Distance between pit crest and alluvium**

As noted in my email below, there is approximately 7 metres between the Modification 7 pit crest and SLR's mapped alluvium boundary (at the location where they are closest to each other). However, to provide further context, given the open-cut pit angle, the distance between the pit wall and alluvium would increase with depth and would be much greater at pit bottom. Additionally, the alluvium at this location is a thin lens, which is effectively zero depth at the location it is closest to the pit. Alluvium depth gradually increases with increasing distance away from the pit. These geometric factors serve to further reduce the risk of material interaction between the pit and alluvium.

- **Consideration of pit reduction**

Given that the various assessments completed on the modification including by DPIE-Water and Hugh Middlemis have not identified material water resource impacts (i.e. DPIE Water states "The proposed reduction in open cut extent which removes the requirement to mine within the Upper Namoi alluvium and to realign Goonbri Creek is supported as this reduces a number of key impacts"), TCPL does not propose to amend the extent of the pit proposed and assessed in the document, and considers that the justification of the pit extent provided in Section 3.3.1 of the Modification Report remains:

A Groundwater Assessment been undertaken to assess the potential impacts on groundwater resources due to the Modification (Section 5.1). Numerical modelling was conducted to assess potential groundwater impacts under the Modification (i.e. mining within 200 m of the Upper Namoi alluvium without the low permeability barrier).

The numerical modelling showed that groundwater inflows to the open cut were reduced under the Modification compared to the approved Tarrawonga Coal Mine. Further, inflows from the Upper Namoi alluvium were predicted to be negligible during operations and post-mining (Appendix A).

The Modification proposes to maximise the extraction of economic coal without the requirement to construct the low permeability barrier, electricity transmission line realignment, Goonbri Road realignment and Goonbri Creek diversion. Approximately 3.4 Mt of additional ROM coal would be extracted under the Modification compared to a scenario where mining stops at the 200 m offset from the Upper Namoi alluvium.

In order to provide some input into potential conditions, we note that the existing condition 34 (Schedule 3) provides the following performance objectives for the Goonbri Creek and the Upper Namoi alluvial aquifer. TCPL proposes the retention of relevant aspects of this condition, with edits shown below to remove reference to the low permeability barrier:

Table 12: Goonbri Creek and alluvial aquifer performance objectives

<i>Goonbri Creek and the Upper Namoi alluvial aquifer</i>	<i>No more than negligible environmental consequences to the alluvial aquifer, including:</i> <i>• negligible change in groundwater levels;</i> <i>• negligible leakage through the low permeability barrier <u>between the alluvial aquifer and the open-cut pit</u>;</i> <i>• negligible change in groundwater quality;</i> <i>and</i> <i>• negligible impact to other groundwater user</i>
---	--

Please let me know if you have any further queries.

Regs,

Tony

Tony Dwyer

Group Manager - Approvals and Environment

Whitehaven Coal Limited

231 Conadilly Street, Gunnedah NSW 2380 Australia

Email: www.whitehavencoal.com.au



From: Tony Dwyer

Sent: Thursday, 10 December 2020 1:23 PM

To: Philip Nevill

Cc: Steve O'Donoghue

Subject: RE: Tarrawonga Mod 7 - RFI

Hi Philip,

The requested distances are as follows:

- Approximately 7 metres between the Modification 7 pit crest and SLR's mapped alluvium boundary (at a discrete point where they are closest to each other).
- Approximately 61 metres between the Modification 7 pit crest and proposed flood bund (at the location where they are closest to each other).

Please don't hesitate to call should you have any queries.

Regs,

Tony

Tony Dwyer

Group Manager - Approvals and Environment

Whitehaven Coal Limited

231 Conadilly Street, Gunnedah NSW 2380 Australia

Email: www.whitehavencoal.com.au



From: Philip Nevill

Sent: Thursday, 10 December 2020 10:34 AM

To: Tony Dwyer

Cc: Steve O'Donoghue

Subject: Tarrawonga Mod 7 - RFI

This Message Is From an External Sender

This message came from outside your organization.

Hi Tony,

Thank you for providing the response following our meeting on 3 December 2020.

Can you please confirm the minimum setback distances (in metres) of the pit crest from the alluvium and flood bund.

Any questions, please contact me on the details below.

Kind regards,

Philip Nevill

Senior Environmental Assessment Officer

Energy, Industry and Compliance | Planning and Assessment | Department of Planning, Industry and Environment

4 Parramatta Square | 12 Darcy Street | Locked Bag 5022 | Parramatta NSW 2150



**Planning,
Industry &
Environment**

