

10 June 2022

Gen Lucas
 Team Leader - Resource Assessments
 Department of Planning and Environment

via email: gen.lucas@planning.nsw.gov.au

Dear Gen

RE: MOOLARBEN COAL COMPLEX – TREATED WATER DISCHARGE QUALITY LIMIT POST 30 JUNE 2022

The purpose of this correspondence is to address the treated water discharge quality related requirements of Project Approval 05_0117 Condition 32 as modified for the Open Cut Optimisation Modification (Mod 15).

Condition 32 establishes the electrical conductivity limit for Moolarben Coal Operations Pty Ltd (MCO) discharge until 30 June 2022 unless the Secretary agrees otherwise, at which point the limit may change to an alternative limit as determined under Condition 32A. As per the requirements of Condition 32A, MCO submitted an Independent Water Quality Study (IWQS) Report to the Department of Planning and Environment on 24 February 2022, which concluded that the existing limit is appropriate. On this basis, MCO proposes to maintain the existing limit.

To date, MCO has not received written comment on the IWQS Report from the New South Wales (NSW) Environment Protection Authority (EPA), and the NSW EPA has indicated that they will not be providing feedback until the end of June. This correspondence is therefore seeking the agreement of the Secretary that MCO can continue to discharge at the current limit after 30 June 2022 under the Project Approval.

Please note that it is critical to operational continuity that MCO can continue to discharge treated water.

See below for relevant excerpt from Project Approval 05_0117 (emphasis added):

32. *The Proponent shall comply with the performance measures in Table 11 to the satisfaction of the Secretary.*

Table 11: Water Management Performance Measures

Feature	Performance Measure
...	
Treated Water Discharge Quality	<ul style="list-style-type: none"> Electrical conductivity limit of 685 $\mu\text{S}/\text{cm}$ (100th percentile discharge limit) for up to 10ML/day until 30 June 2022 (unless the Secretary agrees otherwise) After 30 June 2022 (unless the Secretary agrees otherwise) an alternative electrical conductivity limit for treated water discharges as determined under condition 32A

The following section gives a summary of the requirements of Condition 32A and relevant submission.

Condition 32A – Independent Water Quality Study

An Independent Water Quality Study (IWQS) Report was prepared by the University of Queensland – Sustainable Minerals Institute, an independent scientific organisation approved by the then Department of Planning, Industry and Environment (DPIE). Condition 32A is reproduced below:

By 1 December 2021, unless the Secretary agrees otherwise, the Proponent must complete an Independent Water Quality Study in accordance with ANZECC Guidelines, in consultation with EPA and to the satisfaction of the Secretary. The study must:

- a) be undertaken by an independent scientific organisation with suitable water expertise whose appointment has been approved by the Secretary;*
- b) collect and utilise water quality monitoring data in the Goulburn River using locations endorsed by the EPA;*
- c) determine appropriate background salinity and heavy metal levels for the Goulburn River upstream of the project site;*
- d) recommend an electrical conductivity limit for treated water discharges to the Goulburn River from the Moolarben Coal Complex based on the process outlined in the ANZECC Guidelines.*

The following details how each part of Condition 32A has been addressed.

Condition 32A(a) – The Secretary of the then DPE approved the University of Queensland – Sustainable Minerals Institute, led by Associate Professor Barry Noller, as the independent scientific organisation to undertake the IWQS via correspondence dated 18 July 2019.

Condition 32A(b) – During the development of the study, review of the regional water setting and available water quality showed that the monitoring site UCML SW01 / SW12 was the only appropriate site that could be used to determine background water quality conditions for the upper Goulburn River. UCML SW01 / SW12 was endorsed by the NSW EPA via correspondence received 22 May 2020.

Condition 32A(c) – The analysis indicated that 80th percentile background key heavy metals (filtered to <0.45 micrometres) and salinity concentrations were applicable for the Goulburn River. The background concentrations (as retrieved from the approved upstream reference site UCML SW01 / SW12) were determined, and included in the final report submitted 24 February 2022.

Condition 32A(d) – In accordance with the ANZECC guidelines, as well as the more recent ANZG (2018) guidelines, a “multiple lines of evidence” assessment was undertaken in order to determine the appropriate limit for electrical conductivity. Considering each of these lines of evidence, the IWQS concluded:

Based on multiple lines of evidence (including site-specific ecotoxicity studies, background concentrations, no apparent toxicity response to treatment waters and detailed salinity conversion factor considerations), the current NSW EPA limit for electrical conductivity (EC) of 685 μ S/cm is considered acceptable

Current Status

In accordance with the requirements of Condition 32A, the IWQS Report was prepared in consultation with the NSW EPA, including through NSW EPA endorsement of the monitoring data location, and provision of the completed report on 10 December 2021. No comment was received prior to the submission date (Attachment A).

The IWQS Report was submitted to the Department of Planning and Environment on 24 February 2022, in accordance with the due date revised through correspondence from the then DPIE (Attachment B).

On 7 June 2022, the NSW EPA provided correspondence to MCO indicating that they will not be providing written comments until the end of June.

Under Condition 32, the current electrical conductivity discharge limit is 685 $\mu\text{S}/\text{cm}$ until 30 June 2022, at which point an alternative electrical conductivity limit for treated water discharges as determined under Condition 32A may be implemented (unless the Secretary agrees otherwise).

As the IWQS Report completed under Condition 32A concluded that the limit of 685 $\mu\text{S}/\text{cm}$ is appropriate, MCO proposes to continue to discharge at this existing limit.

Action

In consideration of the IWQS Report conclusion, MCO has not sought an increase in the current discharge limit of 685 $\mu\text{S}/\text{cm}$ at this time.

MCO kindly requests the agreement of the Secretary that MCO can continue to discharge at the existing electrical conductivity limit of 685 $\mu\text{S}/\text{cm}$ after 30 June 2022 under the Project Approval (05_0117).

It is critical to the operational continuity and management of water at the Moolarben Coal Complex that MCO can continue to discharge treated water, particularly given the recent wet conditions across the area.

MCO would be happy to arrange a meeting with the Department to discuss the IWQS findings or other relevant conditions.

Should you have any further queries or require any additional information regarding this matter, please do not hesitate to contact me on 0408 312 269 or Trent.Cini@yancoal.com.au.

Yours sincerely,



Trent Cini
Environment & Community Manager
Moolarben Coal Operations Pty Ltd

ATTACHMENT A

NEW SOUTH WALES ENVIRONMENT PROTECTION AUTHORITY CORRESPONDENCE



DOC22/132241-1

Mr Trent Cini
Environment and Community Manager
Moolarben Coal Operations Pty Limited

Via e-mail: trent.cini@yancoal.com.au

23 February 2022

Dear Mr Cini

**INDEPENDENT WATER QUALITY STUDY
Moolarben Coal Mine**

I refer to your e-mail, dated 10 December 2021, and your request for the Environment Protection Authority (EPA) to provide comment on the Independent Water Quality Study (IWQS) prepared for the Moolarben Coal Mine.

The EPA is currently seeking expert review of this report and requires further time to review the IWQS and provide meaningful comment on the findings of the report and potential next steps. This review will not be able to be completed prior to your submission of this report to the Department of Planning and Environment (DP&E).

The EPA will provide these comments to you once they are available and, in consultation with DP&E, will then contact Moolarben Coal Operations to arrange a time to discuss these comments and any implications for your Environment Protection Licence.

If you have any specific questions regarding this matter please contact Mr Andrew Helms on 6333 3805 or via e-mail at EPA.Southopsregional@epa.nsw.gov.au. For general enquiries to the EPA please call (02) 9995 5000 or e-mail info@epa.nsw.gov.au.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Lucy Apps'.

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ATTACHMENT B

DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT CORRESPONDENCE

Mr Trent Cini
Environment and Community Manager
Moolarben Coal Operations Pty Ltd
12 Ulan-Wollar Road
Ulan NSW 2580

15/11/2021

Dear Mr Cini

**Moolarben Coal Complex Stage 1 (05_0117)
Extension of Time to Submit Independent Water Quality Study**

I refer to your request for an extension of time to submit an Independent Water Quality Study (the study) for the Moolarben Coal Complex Stage 1.

Under condition 32A of Schedule 3 of the above development consent, the study is required to be submitted by 1 December 2021. Extensive investigation work has been completed, including additional sampling, eco-toxicological studies and independent expert review, and that the study is in the final stages of preparation. However, additional time is needed to finalise consultation with the Environment Protection Authority.

The Department considers this request to be reasonable and the Secretary has granted an extension of time until 28 February 2022.

If you wish to discuss the matter further, please contact Gen Lucas on 9274 6489.

Yours sincerely



Stephen O'Donoghue
Director Resource Assessments

As nominee of the Secretary