



DOC21/896783-2

Ms Rose-Anne Hazelwood
Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Email: Rose-Anne.Hawkeswood@planning.nsw.gov.au

Dear Ms Hazelwood

**EPA Additional Comments on MOD 3 - Appin Mine Ventilation and Access Project
(MP08_0150-Mod-3)**

The EPA refers to your request for additional comments on the proposed modification of the Development Approval issued for the Bulli Seam Operation Project Approval 08_0150.

The EPA's Air Technical Advisory Unit has reviewed the Air Assessment for the proposal and prepared comments in the attachment below.

If you have questions regarding the above, please phone Andrew Couldridge on (02) 4224 4100.

Yours sincerely

William Dove

02.11.2021

WILLIAM DOVE
Unit Head Regulation

Phone 131 555
Phone 02 4224 4100
(from outside NSW)

Fax 02 4224 4110
TTY 131 677
ABN 43 692 285 758

PO Box 513
WOLLONGONG
NSW 2520

Level 3
84 Crown Street
WOLLONGONG
NSW 2500
AUSTRALIA

info@epa.nsw.gov.au
www.epa.nsw.gov.au

ATTACHMENT

Summary of AQIA

- The Air Quality Impact Assessment (AQIA)¹ has quantitatively assessed the operational impacts through dispersion modelling, with emission estimation based on monitoring data collected at Appin Vent Shaft No 6, and underground at the Appin West Colliery.
- The AQIA quantitatively assesses the impacts of particulates (TSP, PM₁₀, PM_{2.5}), nitrogen dioxide (NO₂), odour and hydrogen sulphide.
- The AQIA does not predict exceedances of the EPA's impact assessment criteria contained in the *Approved Methods for Modelling and Assessment of Air Pollutants in NSW*.

Advice

The EPA considers that the AQIA has been conducted in general accordance with the *Approved Methods for Modelling and Assessment of Air Pollutants in NSW*. However, it is not transparently clear that assessed emissions and hence potential impacts are based on the proposed total ventilation rate. This is discussed below.

Emission inventory for assessment of impacts during the operational phase lacks clarity

Section 7.2.2 of the AQIA presents the methodology for estimating emissions from the proposed ventilation outlet. The tabulated emission rates for assessed air pollutants in Table 7.3 are estimated based on the proposed flow rates for Ventilation Shaft 8 and monitoring data collected at Appin Vent Shaft No 6 and underground at the Appin Wet Colliery.

However, the tabulated emission rates appear to be based on the flowrates per fan and not the total flowrate for Ventilation Shaft 8. Hence it is unclear if the modelled emissions are representative of the total proposed air flow ventilation rate. It could be that that Table 7.3 presents the estimated emissions for individual air outlet points, and that multiple outlet points have been represented in the modelling to account for the total air flow ventilation rate.

The AQIA does not provide sufficient clarity to transparently understand if this is the case. Where the modelled emissions are based on a single ventilation fan flow rate, rather than the total ventilation flowrate the estimated emissions and predicted impacts could have been underestimated.

Recommendation

The EPA recommend that DPIE seek further clarity from the proponent that the assessment of air quality impacts is based on the proposed total ventilation rate. Where the air quality impact assessment is not based on the proposed total ventilation rate then the AQIA should be revised to ensure reasonable worst-case impacts have been assessed.

References

¹ *Appin Mine Ventilation and Access Project Air Quality and Greenhouse Gas Assessment*, dated 10 June 2021 (EPA reference DOC21/596631-5)