

Our reference: : EF13/4246; SF17/46118 Contact: : Ms Sheridan Ledger; (02) 6333 3803

> Mr Paul Freeman Department of Planning and Environment GPO Box 39 SYDNEY NSW 2001

Dear Mr Freeman

18 September 2018

MOOLARBEN COAL COMPLEX – OPEN CUT OPTIMISATION MODIFICATION EPA RECOMMENDED CONDITIONS OF CONSENT

I refer to previous comments provided by the Environment Protection Authority's (EPA) to the Department of Planning and Environment (DPE) regarding the Moolarben Coal Complex Open Cut Optimisation (the project) and the request from DPE to provide draft consent conditions of consent for the project.

It is pleasing to see the reduction in salinity levels in the information provided to the EPA on 28 August 2018, however, the EPA notes that the adopted position of 685 microsiemens per centimetre is based on the combined pre and post mining data set for salinity. The EPA has previously provided information on why it does not support the use of the combined data set and instead has always advocated the use of the pre-mining data set to establish background salinity levels for the Goulburn River. The EPA reiterates its independent scientists concluded the 80th percentile of the pre-mining data set is 580, rounded up to 600 microsiemens per centimetre was the target limit.

The EPA notes that there is a difference of opinion between Moolarben and EPA's scientists about the EC limit for the project. The EPA has recommended consent conditions which allow Moolarben to discharge for an extended period at the EC limit proposed by them with an improved limit of 600 microsiemens per centimetre when discharge volumes are proposed to increase to 15ML/day.

Further, the EPA has recommended a condition to engage an independent scientific organisation to undertake a study that meets the ANZECC guidelines and provides a definitive position of the EC limit that can be applied to the Moolarben discharge. The EPA considers that an independent scientific organisation would include a University, CSIRO or other similarly governed organisation.

The EPA provides recommended conditions of approval in Attachment 1. It should be noted the recommended conditions in Attachment 1 relate to those matters which remained outstanding post the Response to Submissions Report (RTS) for the project.

Should you have any enquiries regarding this matter please contact Ms Sheridan Ledger at the Central West (Bathurst) Office of the EPA by telephoning (02) 6333 3803.

Yours sincerely

Dr Sandie Jones

Dr Sandle Jones Manager Regional Operations Environment Protection Authority

PO Box 1388 Bathurst NSW 2795 Level 102, 346 Panorama Avenue Bathurst NSW 2795 Tel: (02) 63 333800 ABN 30 841 387 271 www.epa.nsw.gov.au

ATTACHMENT 1 MOOLARBEN COAL COMPLEX – OPEN CUT OPTIMISATION MODIFICATION EPA – RECOMMENDED CONDITIONS OF CONSENT

WATER

- 1. Water discharged from mine water dams at the premises must comply with:
 - a. Site-specific trigger values for metals developed in accordance with the ANZECC methodology, being either 'default' 95% species protection trigger levels, or where background metal concentrations naturally exceed the 95% species protection level, 'site specific' trigger levels based on the 80th percentile concentration.
 - b. An electrical conductivity limit of 685 micro siemens per centimetre and a volumetric discharge limit of 10 ML/day until 31 December 2021.
 - c. An electrical conductivity limit of 600 micro siemens per centimetre and a volumetric discharge limit of 15 ML/day between 1 January 2022 and 31 December 2027.
 - d. An electrical conductivity limit of 600 micro siemens per centimetre and a volumetric discharge limit of 10 ML/day between 1 January 2028 and 31 December 2038.
 - e. If the proponent does not support conditions c and d above, the proponent may engage an independent scientific organisation to undertake a water quality monitoring program, consistent with ANZECC using a reference point endorsed by the EPA and representative data to further inform the agreed background salinity levels. Once this data is available, further consideration may be given to an alternative salinity limit to be placed on the Environment Protection Licence for the premises by 1 June 2021.
- New mine storages (mine infrastructure dams, groundwater storage dams, brine & RO waste and RO associated storage dams) must be lined to a permeability standard of 1 x10⁻⁹ m/s over 1000 mm.

<u>BRINE</u>

- 1. Prior to commissioning of the Reverse Osmosis Plant, a brine management plan must be prepared by the proponent. The plan should include, but not necessarily be limited to:
 - Volumes of brine generated;
 - Brine make up;
 - Proposed brine management (proportions for re-use and disposal)
 - Locations of brine disposal and planned volumes for different disposal areas or reuse options;
 - Monitoring program to establish that brine is not leaving the mine workings and impacting on waters.
- 2. All brine and waste material generated by the Reverse Osmosis plant must be managed to prevent the pollution of waters as defined by the *Protection of the Environment Operations Act* 1997.

<u>DUST</u>

1. The proponent must implement all reasonable and feasible PM_{2.5} emission controls, including evaluation and adoption of best practice diesel emission controls.

- 2. The proponent must achieve and maintain a control efficiency on dust from roads on the premises of 90% or greater at all times.
- 3. The proponent must install and operate a real-time PM_{2.5} monitor.

.

.

.