

22 July 2018

[REDACTED]

Dear Sir Madam,

RE: Modification 7 Environmental Assessment – Australian Pacific Coal Limited

AQC Dartbrook Management Pty Ltd (AQC) is the owner of Dartbrook Mine, which is located approximately 5 kilometres (km) north of Muswellbrook in the village of Kayuga. AQC is a wholly owned subsidiary of Australian Pacific Coal Ltd. Dartbrook Mine is managed in accordance with Development Consent DA 231-7-2000.

AQC is seeking a modification to DA 231-7-2000, according to their letter dated 27 February 2018 to the Director of Resource Assessment, to facilitate further underground mining operations at Dartbrook Mine. The modification proposes bord and pillar mining of the Kayuga coal seam and changes to the method of transferring coal to the train loadout facility. The modification seeks to extend the period of approval by 5 years (until 5 December 2027).

- [REDACTED]
1. [REDACTED] and [REDACTED]
 2. [REDACTED]
- [REDACTED]
- [REDACTED]

Background:

- Mine is managed in accordance with DA 231-7-2000.
- The original DA provided approval for the Hunter Tunnel which was used to transfer coal from the mine workings to the East Site using conveyors in the underground Hunter Tunnel.
- The current DA seeks to deliver the extracted coal to the surface at the West Site, haul it along the existing private road network to a new shaft site (to be constructed west of the New England Highway). The coal will be transferred down the shaft into the Hunter Tunnel, where it will be conveyed beneath the New England Highway to the East Site.
- Operating hours will remain unchanged from the original DA and mods which is 24 hours per day, 7 days per week.
- Section 4.3.1 states - The conveyors in the Hunter Tunnel were removed by the former owners of Dartbrook Mine during care and maintenance. AQC has determined that it would require significant capital expenditure to replacement the Hunter Tunnel conveyors for the proposed mining activities.

Our submission is broken into four components:

1. Seeking Confirmation Regarding Proposed Modification and future development;
2. Air Quality Assessment;
3. Potential impact of the noise [REDACTED]
4. Potential impact of groundwater availability [REDACTED]

1. Proposed Modification

Page 32, Section 4.3.1 of Environmental Assessment Report states - *The conveyors in the Hunter Tunnel were removed by the former owners of Dartbrook Mine during care and maintenance. AQC has determined that it would require significant capital expenditure to replacement the Hunter Tunnel conveyors for the proposed mining activities....*

At the proposed maximum production rate of 1.5 Mtpa of ROM coal, the Modification will require an average of 96 truck cycles per day (192 one-way movements per day).

We have the following queries/issues/concerns with this proposed modification change:

1. Replacing the Hunter Tunnel with trucks increases the adverse impacts, through increased emissions, on the local environment (particulates, fumes, noise).
2. Concerned that the B-double trucks proposed can actually hold 60T payload, please confirm.

The Environmental Assessment report states coal transport by truck from the Kayuga Entry to the proposed shaft site restricted to weekdays during daytime hours, 7am to 6pm in Section 4.5 but not in Section 4.3.1. It is also stated again in Bridges Acoustics Report.

If this modification application is approved, we request that a specific condition is included in the amended Conditions of Consent to state, *coal transport by truck is only permissible from the Kayuga Entry to the proposed shaft site restricted to weekdays during daytime hours, 7am to 6pm. Total truck movements per day 192.* This request is being made as many times proponents say one thing in the environmental assessment report and then don't do it in practice and they can't be held accountable as not in conditions of consent.

2. Air Quality Assessment

2.1 Draft Mining SEPP

No mention was made in either the Environmental Assessment Report prepared by Hanson Bailey, nor the Pacific Environment Dartbrook Underground Study – Air Quality of the fact that the New South Wales Government released a DRAFT Mining State Environmental Planning Policy (SEPP) in November 2017 for stakeholder comment up to mid February 2018.

The following has been extracted from the Proposed Mining SEPP amendments: Air and Noise impacts – explanation of intended effect.

In 2017, the EPA published the Approved Methods for Modelling and Assessment of Air Pollutants in New South Wales (EPA, 2016) (Approved Methods) and the Noise Policy for Industry (EPA, 2017). These documents made the following changes to the Government assessment criteria for:

- *Air quality – the Approved Methods tightens the air assessment criteria for the fine particles (PM_{10}) from $30 \mu\text{g}/\text{m}^3$ to $25 \mu\text{g}/\text{m}^3$ and introduced new assessment criteria for very fine ($PM_{2.5}$) particles, at $25 \mu\text{g}/\text{m}^3$ (24-hour) and $8 \mu\text{g}/\text{m}^3$ (annual) and*
- *Noise impacts – the Noise Policy for Industry slightly modified assessment noise levels, however no changes to cumulative noise levels have been made.*

(The revised assessment criteria were developed and consulted on by the EPA. This exhibition process is not consulting on the revised assessment criteria, or any other elements of the EPA's Approved Methods or the Noise Policy for Industry).

It is now proposed to amend Clause 12B of the Mining SEPP to adapt the EPA's revised assessment criteria as non-discretionary standards for cumulative noise levels and cumulative air quality levels.

Based on the fact that the assessment criteria will not change, as stated clearly above, and the fact that this modification was prepared knowing that this criterion will be adopted, we request that the acquisition criteria for $PM_{2.5}$ be incorporated into any amended Conditions of Approval relating to the approval of this modification request.

2.2 Particulate Emissions

In Section 8.1.2 of the Environmental Assessment report prepared by Hansen Bailey, it states on page 61: *"The dispersion modelling predicted dust levels at all sensitive receptors in the vicinity of the Modification. Receptors that are within Mount Pleasant Mine's zone of acquisition (Receptors) 153, 212, 228, 238, 242, 244, 374 and 391) were excluded from the impact assessment.*

No explanation was given for this action by the Air Quality consultant, [REDACTED]

The "excluded" sensitive receptors results for particulate emissions were presented in Appendix D of the Air Quality report but the actual results were not incorporated into the main assessment of impacts and conclusions sections, which is extremely misleading as exceedances were recorded.

Table D-12-4 Predicted Annual Average Dust Deposition concentrations from the Modification alone, Mount Pleasant alone and cumulative clearly shows that the NSW EPA Impact Assessment Criteria for $PM_{2.5}$ will be exceeded. The exceedance is directly linked to the Modification alone and NOT Mount Pleasant.

It is noted that all eight (8) properties listed in this table were at $8 \mu\text{g}/\text{m}^3$ or above the NSW Impact Assessment Criteria Limit.

For whatever reason, by excluding these sensitive receptors from the main results and conclusion the information contained in the main assessment report is incorrect and misleading.

In regards to the Main Report – it states in relation to Impact Assessment $PM_{2.5}$ in Section 8.1.3:

In relation to annual average $PM_{2.5}$ concentrations, there are no predicted exceedances of the EPA impact assessment criterion of $8 \mu\text{g}/\text{m}^3$ due to the Modification alone. When background concentrations and the predicted contribution from Mount Pleasant Mine are included, four sensitive receptors are predicted to experience annual average concentration above the criterion of $8 \mu\text{g}/\text{m}^3$. One of these properties (181) is currently within the Mount Pleasant Mine's zone of management.

The VLAMP does not include any criteria for $PM_{2.5}$ concentrations. Therefore, the predicted $PM_{2.5}$ concentrations do not give rise to any acquisition or mitigation obligations.

Clearly the above words are incorrect when ALL sensitive receptors identified by the Consultant are considered.

We request again that if this modification application is approved by the Department that a condition of approval be that the air quality acquisition criteria for $PM_{2.5}$ be included as $8 \mu\text{g}/\text{m}^3$.

As discussed in Section 5.2.4 of the Pacific Environment Air Quality Report, the background $PM_{2.5}$ concentration was calculated to be $7.6 \mu\text{g}/\text{m}^3$ in the area, as not specific data was available. The actual $PM_{2.5}$ for Muswellbrook has average over the impact assessment criteria between 2012 and 2016 has average above $9 \mu\text{g}/\text{m}^3$. However the impact of wood-burning fires has contributed to the high levels during winter months, so estimate made using data from Aberdeen OEH site.

The average concentration used is already close to the NSW EPA impact assessment criterion of $8 \mu\text{g}/\text{m}^3$. Hence our concern is why a development is allowed to occur in the area when the existing background levels are calculated to be $7.6 \mu\text{g}/\text{m}^3$ and this does not include the $PM_{2.5}$ emissions that will occur as a result of the Mount Pleasant mine which recently started construction.

We request that continuous particulate monitors be installed and operated [REDACTED] throughout the life of the mine for $PM_{2.5}$, we would like to also see PM_{10} and TSP monitored continuously as well. Muswellbrook OEH particulate monitoring sites are influenced by wood burning fires during winter months and are not representative [REDACTED]

3. Potential Impact of Noise [REDACTED]

Bridges Acoustics – AQC Dartbrook Management Pty Lt, Dartbrook Mine, Modification 7, Acoustic Impact Assessment, Report J0130-126-R1, 5 June 2018.

Page 6, Section 3.2 – *Weather conditions included in the noise model have been determined from supplied data obtained from the Dartbrook Mine meteorological station located approximately 220 m north of the rail loop, for the year 2014 which was selected as a representative year.*

Table 1: Prevailing Winds Year 2014, Met 1 West.
Queries:

- Text refers to the Met station at the rail loop – however this is Met02 not Met01 as identified in Table 1 heading. Please confirm which met station data was used?

- Why wasn't modelling undertaken using each set of met data as Figures 5-12 and 5-13 in the Air Quality Report shows distinct variations in wind direction from the west site and east site due to local topography?

We are concerned about noise from the following activities:

- i) Noise from west site operations, particularly evening and night time - all movements to the Kayuga seam entrance occur at the West Site entrance (24 hours a day, 7 days a week). Staging area also located on West site, all materials to go underground is stored in open area, near workshop and near top of the hill area. This area does not have any acoustic bunding/wall to reduce the noise at our home [REDACTED]
- ii) Increase local traffic (how do you monitor who resides in the area?)
- iii) Increase noise levels from the 192 B-double truck movements
- iiii) Low frequency noise experienced previously from the crusher - which can operate 24 hours a day.

If the modification is approved, we would be seeking noise monitoring to occur [REDACTED] to determine if:

- a. the proposed noise levels are within the criteria outlined in the consent
- b. low frequency noise levels is having adverse impact on our health.

We also request that an additional condition to limit crashing activities to daylight hours as stated on page 8 of the Acoustic Report - 7am to 6 pm weekdays is included in the amended consent. Again we would like this stipulated in the consent to ensure operations only occur during daylight hours.

4. Bore Impact

[REDACTED] We have always been concerned about potential impact on loss of groundwater supply for our stock [REDACTED]

We would seek regular monitoring of our bore commencing prior to any operations occurring, this is to establish a baseline to allow monitoring to occur against in the future. Given the current drought conditions, adjustments will need to be made as to the "normal" groundwater levels.

Thankyou for your time and consideration of our submission to this Modification.

Yours faithfully

[REDACTED]

[REDACTED]