



Your reference: SSD 6464  
Our reference: DOC14/290451 EF13/3817  
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Department of Planning and Environment  
GPO Box 39  
SYDNEY NSW 2001

Attention: Ms Elle Donnelley

Dear Ms Donnelley

**WARKWORTH CONTINUATION PROJECT (SSD 6464)  
RESPONSE TO SUBMISSIONS REPORT**

Reference is made to your email to the Environment Protection Authority (EPA), dated 11 November 2014, seeking the EPA's comments on the report titled '*Warkworth Continuation 2014 – Response to Submissions Report: November 2014*' (RTS report) prepared by EMGA Mitchell McLennan Pty Limited.

The EPA notes that at the time of providing this submission the Department of Planning and Infrastructure has already issued their recommendations to the Planning Assessment Commission, consisting of the following documents:

- Secretary's Assessment Report;
- Recommended Conditions of Consent;
- Ministers Terms of Reference, dated 6 November 2014; and
- Economic Peer Review.

The EPA has reviewed the RTS report and provides the following response.

Air Quality

The EPA considers that the proponent has addressed the air quality related issues raised in our previous submission in regards to the modelling scenarios, diesel assessment and blast assessment.

There are still some inconsistencies in the cumulative 24-hour average PM<sub>10</sub> assessment. Namely:

- The 2012 inventory was not included as part of the report;
- The results presented in the assessment are the relative difference between future modelled years and the base year 2012 and actual 24-hour average predicted concentrations have not been provided in the report;
- Results are presented for the Project and the adjacent Mt Thorley Operations Continuation Project (SSD 6465) combined, Project only results have not been presented in the RTS report; and
- A full year of results for 2012 and future years have not been presented in the RTS report.

Detailed comments on these issues are provided in **Attachment 1**.

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Noise

The EPA has reviewed the RTS report in relation to noise and vibration issues, and considers that the proponent has sufficiently addressed our previous comments regarding the noise assessment.

While some matters such as the location numbering of one privately owned residence and the applicable project specific noise limits at that property may still need to be finalised, the EPA considers this can be achieved through amendments to the licence if approval is granted for the project.

If you require any further information regarding this matter please contact Michael Howat on 4908 6819.

Yours sincerely



27.11.14

**KAREN MARLER**  
**Head Regional Operations Unit – Hunter**  
**Environment Protection Authority**

Encl: ATTACHMENT 1 – EPA's Air Quality Assessment Comments

**ATTACHMENT 1****EPA's Air Quality Assessment Comments  
Warkworth Continuation Project (SSD 6464)****24-hour PM<sub>10</sub> Cumulative Assessment****1. Accounting for 2012 Impacts****ISSUE:**

Proponent to provide details of the 2012 emissions inventory and the methodology to account for 2012 impacts in the cumulative assessment.

**RTS Report:**

The 2012 emissions inventory used in the cumulative assessment is detailed in Appendix D of the RTS report.

To account for background levels when assessing total (cumulative) 24-hour average PM<sub>10</sub> impacts, only incremental levels were added to the total measured ambient dust levels (per the NSW EPA contemporaneous assessment guidance). Background dust levels were estimated for the cumulative assessment by modelling the past (known) mining activities (including Mt Thorley Operations (MTO), Bulga Coal Complex, Wambo, Hunter Valley Operations and Rix's Creek coal mines) during January 2012 to December 2012. The modelled data was compared with the actual measured data from the corresponding monitoring stations over this period, to identify the contribution of non-modelled dust sources. The resultant future predicted values model the worse-case impacts on nearby sensitive receptors.

**EPA's Response:**

The 2012 emissions inventory was not included as an appendix to the RTS report. The background levels shown in the original Environmental Impact Statement (EIS) and the RTS report appears to be the monitored concentrations at the TEOMs when compared with the monitoring data in Appendix D of the Air Quality Impact Assessment (AQIA). This differs from the background dust level methodology described in the RTS report.

Additionally, it appears there are inconsistencies with the dates of some of the monitored background concentrations in the 24-hour PM<sub>10</sub> cumulative assessment and the tabulated TEOM data in Appendix B of the AQIA. For example, Appendix B of the AQIA does not include the measured concentration at the monitors for 7 October 2012 and the measured concentration on 14 June 2012 at the Bulga TEOM was 12 µg/m<sup>3</sup>. These dates and a number of other dates have different concentrations to the background concentrations presented in the 24-hour PM<sub>10</sub> cumulative assessment tables.

It is noted that the modelled increment (mine contribution) presented is the difference between the modelled future impacts and the modelled 2012 impacts. In other words, the relative change in the future years from base year 2012 has been presented. The actual predicted concentrations for the 2012 base year and the future years have not been provided as part of the assessment.

The presented incremental relative change in concentrations includes contribution from MTO. Whilst it is acknowledged that due to the interactions between the two mines, MTO needs to be considered in the cumulative assessment. However, the Project only contributions should also be provided for transparency in the assessment process.

The proponent should provide the 2012 predicted impacts for everyday of the year for the Project alone and Project with MTO for transparency. Additionally, the proponent should check that the date and background concentration used in the cumulative assessment is consistent.

## 2. Location of Predicted Impacts

### **ISSUE:**

Additional 24-hour average PM<sub>10</sub> cumulative analysis should be completed at the sensitive receptors close to mining operations.

### **RTS Report:**

Additional analysis of 24-hour average PM<sub>10</sub> cumulative impacts was completed at receptors 81, 102, 118, 126, 259 and 264. The results of the analysis at these receptors do not alter the conclusions of the AQIA.

### **EPA Response:**

The analysis at the additional receptors is considered to be in line with EPA's requests for analysis at sensitive receptors. However, as noted above, the relative difference between future years and base year 2012 has been presented and not the actual predicted concentrations. For transparency, the actual predicted concentrations should be provided.

Further, there are inconsistencies in the dates and the corresponding background levels in Appendix D1 and D2. For example, table 10 in Appendix D1 have different dates to table 11 in Appendix D2 despite the fact that both tables utilize the same measured concentrations in 2012 at the MTIE monitor. The proponent should cross check that the correct background levels have been matched with the appropriate date for predicted levels.

## 3. Predicted Cumulative Impacts

### **ISSUE:**

A full year of assessment should be provided for the 24-hour PM<sub>10</sub> cumulative analysis and the predicted number of days should be verified.

### **RTS Report:**

It is acknowledged that the full tables for the contemporaneous 24-hour cumulative impact assessment were not correctly transcribed into the air quality and greenhouse gas study. The full data are presented in Appendix D1 of this report along with assessment tables for the assessment locations listed by the EPA. The data shows the contemporaneous assessment over a full year as requested.

### **EPA Response:**

As discussed above, the results presented are the relative difference between the predicted concentration for future years and 2012 base year and not actual predicted concentrations from the Project. Additionally, the recorded background concentrations and dates should be cross checked for consistency. It is also noted that a full year of data for the 24-hour PM<sub>10</sub> cumulative analysis is not presented in the appendices of the RTS report.