

EXTRACTS FOR NSW HEALTH

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2. RESPONSES TO ISSUES RAISED ABOUT THE AMENDED PROJECT

2.4 AIR QUALITY

2.4.3 Air Quality Modelling

2.4.3.3 Representative Comment(s)

While the cumulative average annual PM_{10} and $PM_{2.5}$ levels in Table 5.5 (page 2B-41) are below the recently amended NEPM standards of $25\mu\text{g}/\text{m}^3$ and $8\mu\text{g}/\text{m}^3$ respectively, the background $PM_{2.5}$ and PM_{10} levels are significantly below the levels seen in official NSW Office of Environment & Heritage air quality monitors in similar rural settings. NSW Environment Protection Authority's review of the validity of the background estimates will be important.

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Response

The submission received by NSW EPA made no comment regarding the validity of the assumptions regarding background air quality levels, suggesting that the EPA is satisfied the data are representative. Notwithstanding this, the validity of the data is demonstrated as follows.

Whilst NSW OEH have air quality monitors located in areas identified as being 'rural', none of the locations can be considered comparable to the location of the monitors used to determine the existing air quality in the vicinity of the amended Project, given that each rural area is unique in its topography, population density and surrounding activities.

The NSW OEH rural air quality monitors are located in the towns of Albury, Bathurst, Tamworth, and Wagga Wagga (**Figure 2.4.1** (NSW OEH, 2016¹)).

¹ NSW Office of Environment and Heritage (OEH) (2016) <http://www.environment.nsw.gov.au/aqms/sitesrural.htm>

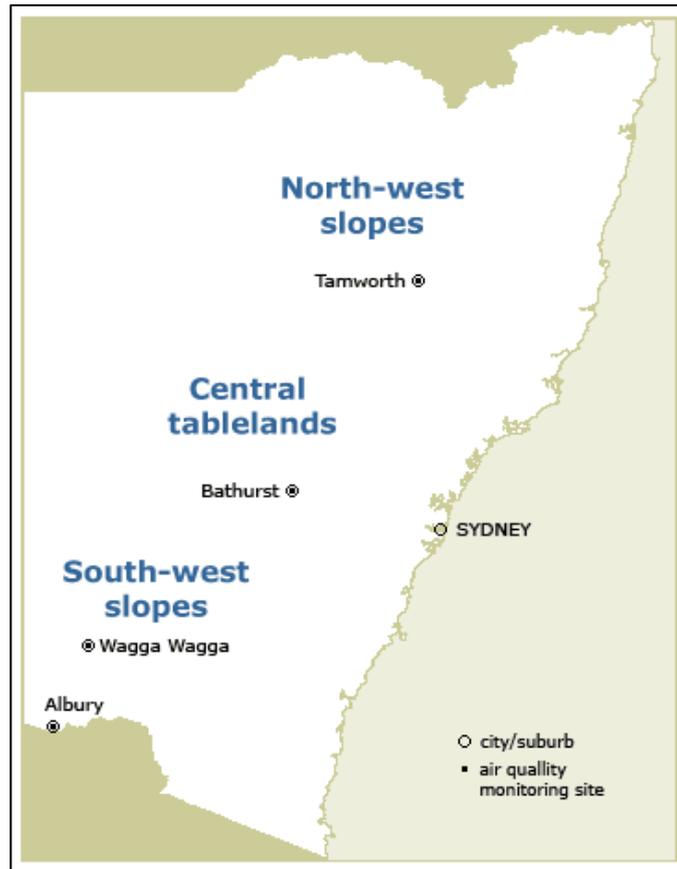


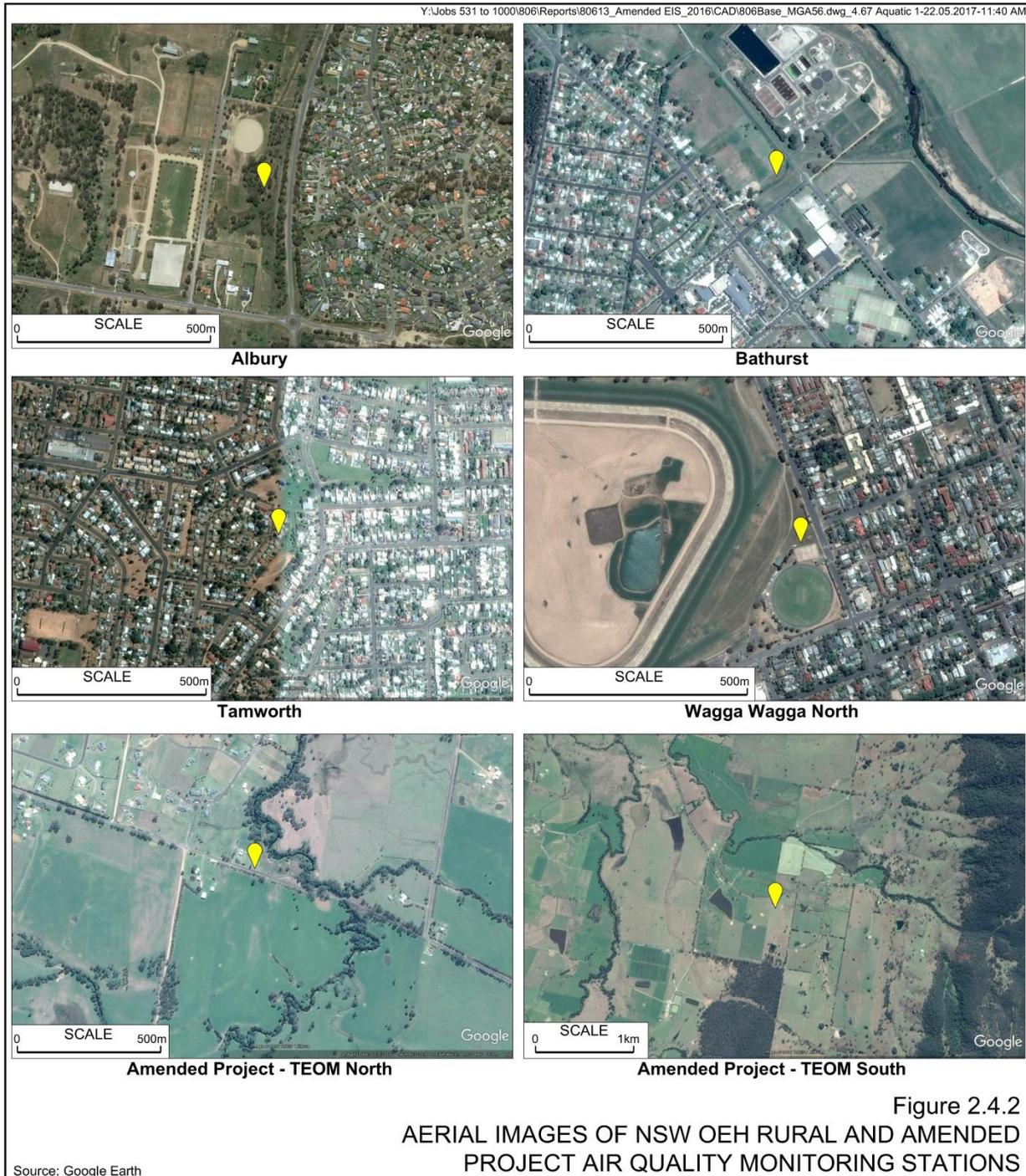
Figure 2.4.1 NSW OEH Rural Air Quality Monitoring Stations

Table 2.4.5 compares the Australian Bureau of Statistics (ABS, 2016²) population data for 2015 for the Statistical Area (SA) within which each of the NSW OEH rural monitors are located, and the population of Gloucester SA, within which the monitoring equipment for the amended Project is located. **Figure 2.4.2** shows an aerial image of the area surrounding each of the NSW OEH monitors, compared with the area surrounding the monitors for the amended Project.

Table 2.4.5
2015 Population Data for NSW OEH Rural Monitoring Locations and Gloucester

Statistical Area Name	Statistical Area Code	2015 Population
Albury	11172	14,327
Bathurst	11058	25,347
Tamworth	11202	21,518
Wagga Wagga - West	11270	12,217
Gloucester	11167	5,150

² Australian Bureau of Statistics (ABS) (2016), 3235.0 - *Population by Age and Sex, Regions of Australia, 2015*, Available from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3235.02015?OpenDocument> (accessed 15 November, 2016)



It is apparent that not only is the population of the Gloucester SA less than half that of the next largest “rural” area (Wagga Wagga - West), but the area in the vicinity of the Project’s monitors is entirely rural, compared with the NSW OEH monitors that are located adjacent to predominantly residential areas. It is therefore not surprising that higher concentrations are measured at the NSW OEH rural monitors compared with those used to determine background levels for the amended Project.

2.17 HEALTH ISSUES

2.17.3 PM_{2.5} and Health Risks

2.17.3.1 Representative Comment(s)

As the incremental impact of PM_{2.5} relates to changes in health risk, it is of concern for a community with relatively good air quality where a development is proposed. The incremental impact of the project on PM_{2.5} stated in Table 5.5 demonstrates that some may be exposed to a level of PM_{2.5} of 0.83µg/m³ above what the level would be without the project. This would represent a non-negligible increase in health risk. NSW Health would recommend that all reasonable and feasible measures are taken to minimise exposure of the community.

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Response

As outlined in Section 2.17.2.1 of this document, the HRA applied concentrations predicted to occur at the two most affected residences (#6 and #18 – **Figure 2.17.1**) to the entire Gloucester and Faulkland suburbs respectively and that the resultant health risk is considered to be “sufficiently small and to be of no cause for concern” in accordance with the NEPM AAQM. Notwithstanding, GRL accepts NSW Health’s recommendation to implement all reasonable and feasible measures to minimise particulate generation and therefore subsequent exposure of the community, noting that, in contemporary environment protection licences for mining projects, there is a requirement that: “*the premises be maintained in a condition which minimises or prevents the emission of dust from the premises*” and “*activities occurring in or on the premises must be carried out in a manner that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust*”.

Similarly, in contemporary development consents for many projects there is a requirement that the applicant shall “*implement all reasonable and feasible measures to minimise the off-site odour, fume, spontaneous combustion and dust emissions from the development*”.

Section 7 of the Air Quality Assessment provides an overview of the best practice dust control measures that would be adopted for the amended Project.