# CUMULATIVE IMPACT ASSESSMENT
# MT ARTHUR, BENGALLA AND MANGOOLA COAL MINES

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# Cumulative Impact Assessment
# Mt Arthur, Bengalla and Mangoola Coal Mines


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# 1 INTRODUCTION

Todoroski Air Sciences (TAS) was commissioned by the New South Wales (NSW) Department of Planning and Infrastructure (DP&I), to undertake a cumulative air quality impact assessment for three proposed modifications being requested for the Mount Arthur, Bengalla and Mangoola coal mines (the Project).

Recently, the Mount Arthur, Bengalla and Mangoola coal mines have each presented a cumulative air quality impact assessment as part of their environmental assessments. Each of these assessments differs by some degree as a result of assumptions by one mine about the other mines' operations, varying meteorological data and different dispersion models.

This Project focuses on providing a single, updated cumulative impact assessment based on the most current information provided within the assessments, common meteorological data and the same modelling method. The aim is to deliver an assessment which can enable the DP&I to make equitable, informed and reasonable planning decisions in the context of three significant mines all seeking approval for modifications at the same time.

The study essentially re-models each mine's proposed project cumulatively on the same basis.

The study considers only the pollutants which may cause impact at receptors whether mine owned or privately owned. The assessment examines annual average $PM_{2.5}$ and $PM_{10}$ concentrations for the Project operating cumulatively with other sources including other nearby mining projects (the total (cumulative) impact) and the potential effects of the Project on cumulative 24-hour average $PM_{10}$ concentrations.

# 2 PROJECT SETTING

The Project focuses on the area near the Hunter River approximately between each of the three mines considered for this assessment located in the Upper Hunter Valley of NSW.

**Figure 2-1** presents the location of the Project area in relation to the three mines, the other existing and proposed neighbouring coal mining operations and the privately-owned and mine-owned receptors of relevance to this assessment. **Appendix A** provides a detailed list of all the privately-owned and mine-owned receptors assessed in this report.

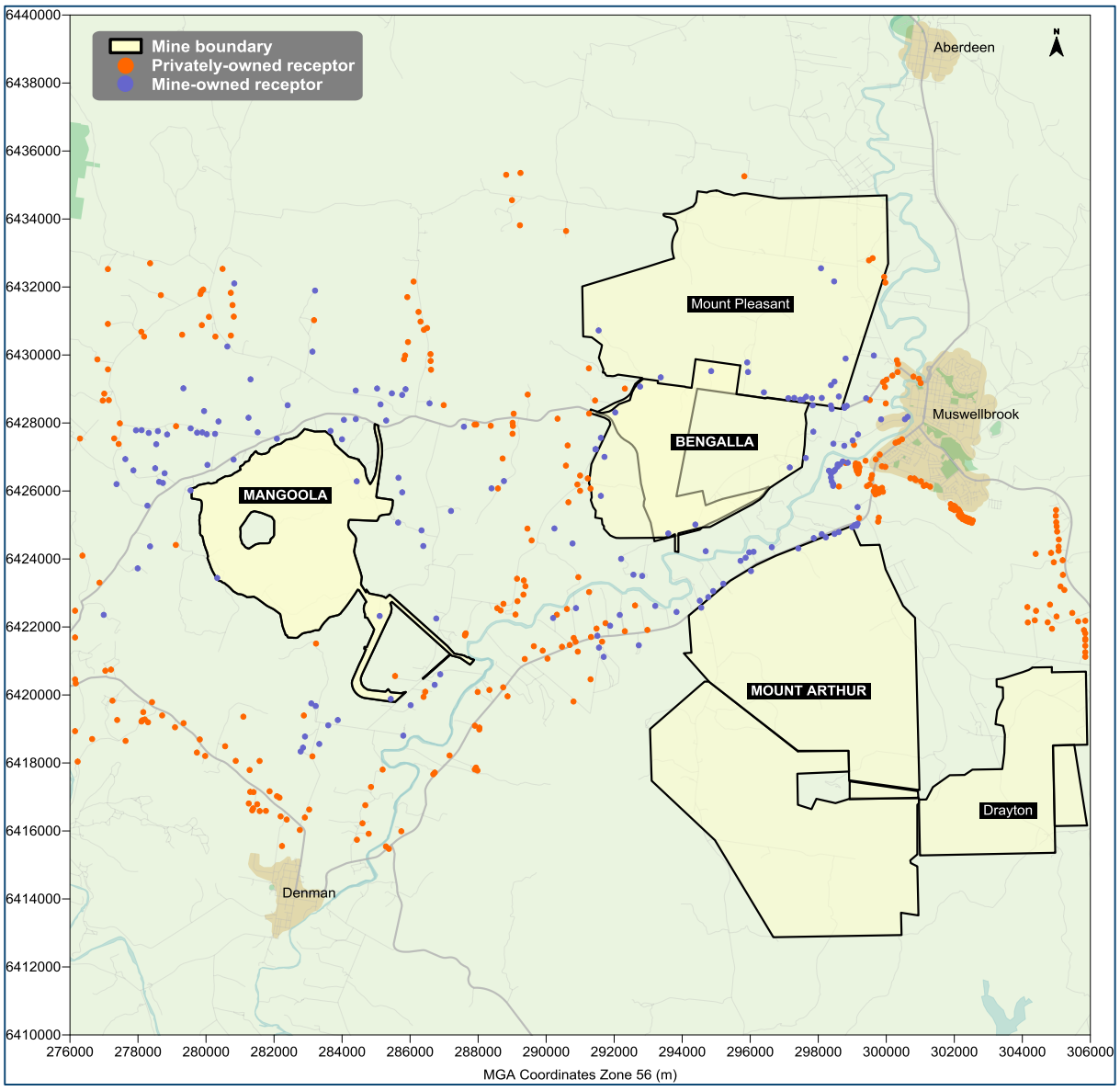


**Figure 2-1: Project setting**

# 3 APPROACH TO ASSESSMENT

This assessment has drawn upon the information pertaining to the "*Air Quality and Greenhouse Gas Assessment Mt Arthur Coal Open Cut Modification*" (**PAEHolmes, 2013**), "*Air Quality and Greenhouse Gas Impact Assessment Continuation of Bengalla Mine*" (**TAS, 2013b**) and "*Air Quality and Greenhouse Gas Assessment Mangoola Coal*" (**TAS, 2013a**).

This report is orientated to the presentation of the results of a cumulative assessment of the Project. Further specific details regarding each of the mining operations can be found within the relevant assessments for each mine.

The chosen dispersion model is the CALPUFF model, an advanced "puff" model which can deal with the effects of complex local terrain on the dispersion meteorology over the entire modelling domain in a three-dimensional (3D), hourly varying time step.

The modelling approach applied by the Mangoola and Bengalla Coal mines has also been used in this study. Further detail regarding the model setup can be found in the air quality assessments for the Bengalla and Mangoola coal mines.

## 3.1 Expected differences between this study and existing assessments

The following aspects would lead to differences between the results in this study and those presented in the existing assessment for each mine.

- Meteorological data for 2012 was used in this study and is different to the year of meteorological data used in all three existing studies. The different meteorological data will affect the shape of the dust impact isopleth to some extent, and is expected to show more impact in some areas, and less impact in other areas.

- The meteorological data for future year modelling incorporates consideration of the effects on meteorology due to changes in the future terrain near the mines. The existing Mangoola and Bengalla assessments could only estimate the future terrain near the other mines, and the existing Mt Arthur assessment does not incorporate such considerations in its meteorological data. The proposed future mine terrain for all mines is used in this assessment, and this will affect the meteorology in each future year somewhat differently for each mine relative to the assumptions made in their original assessments..

- As the meteorological data changes in this study, the wind dependent emissions in each of the mine's proposed modifications will be affected. Hence the wind dependent emissions for each mine have been changed in this study accordingly. This would make only a minor difference to the Bengalla and Mangoola dust emissions inventories (as these included mine terrain considerations), but makes a large difference to the Mt Arthur dust emissions inventory. The existing Mt Arthur study used meteorological data from the Macleans Hill meteorological station, which because of its elevation exhibits higher wind speed than surrounding stations. It is understood that these data were used for the Mt Arthur Coal Open Cut Modification for direct comparison with the previous study in the Mt Arthur Consolidation Project in 2009, where alternative data were unsuitable at that time.

- The CALPUFF model was used in this study in the same manner as it was used in the Bengalla and Mangoola study. This would only affect the Mt Arthur assessment which used the ISCMOD model. The CALPUFF model will consider the effects of three-dimensionally varying weather data and calm conditions.

Other aspects such as different baseline dust data for 2012 will also result in differences.

The key observation is that such differences are expected to arise and are a key reason for commissioning this study, which essentially assesses each proposed mine project on a like-for-like basis.

## 3.2 Modelling Scenarios

The modelling scenarios developed for this report were based on a review of each mine's proposed production schedule and activity rate to determine which modelled years aligned best with the years considered to represent the potential worst-case years for impact.

We note that in practice there would be some variation to the nominated schedules and timings however the scenarios are considered to represent the worst-case based on the available information.

Three scenarios were identified for assessment of likely worst case cumulative impacts. **Table 3-1** summarises the modelling scenarios and proposed schedules of each of the operations and the corresponding year modelled in the air assessments.

**Table 3-1: Modelling scenarios**

| Mine | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ROM Coal (Mtpa) | Product Coal (Mtpa) | Overburden (Mbcm) | Year in EIS | ROM Coal (Mtpa) | Product Coal (Mtpa) | Overburden (Mbcm) | Year in EIS | ROM Coal (Mtpa) | Product Coal (Mtpa) | Overburden (Mbcm) | Year in EIS |
| Mt Arthur | 32 | 28.4 | 144.5 | 2016 | 32 | 28.4 | 146.8 | 2022 | 32 | 28.4 | 176.9 | 2026 |
| Bengalla | 15 | 11.8 | 51.4 | Year 4 | 15 | 11.8 | 55 | Year 8 | 15 | 11.8 | 65.0 | Year 15 |
| Mangoola | 13.5 | 11.2 | 35.1 | Year 5 | 13.5 | 11.2 | 40.5 | Year 10 | N/A | N/A | N/A | N/A |

## 3.3 Emission estimation

The emission estimations for each of the mining operations were based on those presented in each individual air quality impact assessment. For each of the chosen model years, information regarding the mine plan and terrain data were utilised and were included in the meteorological modelling as outlined in the following section.

It is noted that due to the different year of meteorological data in this assessment some adjustments were applied to the emissions inventories as presented in each of the individual air quality assessments.

These adjustments focused on the emission estimation equations in which wind speed is a variable, i.e. the equations for activities such as the loading and emplacing material and wind erosion which vary according to wind speed in each hour. These adjustments are necessary to ensure that the wind-sensitive emission estimates are made using the same data applied in the dispersion modelling. Thus on wind days, when more dust would occur, the modelled release of dust will match up with the wind conditions in the model for every hour of the year. The meteorological data generated in CALMET for

this assessment were analysed for each of the mining operations and showed differences in the meteorological data applied in each of the individual mine dust emission inventories.

A summary of the effect of the wind speed adjustment on the dust emissions for each of the individual mining operations is presented in **Table 3-2**. Further details regarding the emissions estimation techniques can be found in the respective air quality assessments.

**Table 3-2: Estimated TSP emissions (kg/year)**

| Scenario | Mt Arthur | | | Bengalla | | | Mangoola | | |
|---|---|---|---|---|---|---|---|---|---|
| | Revised | Original | Diff. | Revised | Original | Diff. | Revised | Original | Diff. |
| 1 | 15,825,238 | 23,099,803 | 31% | 7,070,301 | 7,114,705 | 1% | 5,404,472 | 5,454,062 | 1% |
| 2 | 18,357,826 | 28,800,554 | 36% | 7,766,170 | 7,812,619 | 1% | 4,945,893 | 5,000,255 | 1% |
| 3 | 18,778,453 | 29,104,088 | 35% | 8,679,733 | 8,729,823 | 1% | N/A | N/A | N/A |

Other existing and approved mining operations in the area would make a potential contribution to the dust levels in each of the scenarios and have been considered in the assessment. We note that these sources have not been modelled with the same level of detail as the other operations, however suitable approximations have been applied for the purposes of this assessment.

**Table 3-3** summarises the TSP emissions applied for other mining operations.

**Table 3-3: Estimated TSP emissions for other operations (kg/year)**

| Scenario | Mt Pleasant | Drayton |
|---|---|---|
| 1 | 2,362,500 | 3,225,173 |
| 2 | 4,250,000 | N/A |
| 3 | 5,250,000 | N/A |

## 3.4 Meteorological modelling

CALMET meteorological modelling used a nested approach where the 3D wind field from the coarser grid outer domain is used as the initial guess (or starting) field for the finer grid inner domain. This approach has several advantages over modelling a single domain. Observed surface wind field data from the near field as well as from far field monitoring sites can be included in the model to generate a more representative 3D wind field for the modelled area. Off domain terrain features for the finer grid domain can be allowed to take effect within the finer domain, as would occur in reality, also the coarse scale wind flow fields give a better set of starting conditions with which to operate the finer grid run.

The available meteorological data for the 2012 calendar year was chosen for this assessment based on a long-term analysis of available meteorological and ambient air quality monitoring data.

Each mining operation's meteorological station was included in the CALMET as well as a data collected from a number of surrounding Bureau of Meteorology stations.

## 3.5 Dispersion modelling

The CALPUFF modelling was setup in a similarly to that for the Bengalla and Mangoola air quality assessments, further detail regarding this can be found by reference to these assessment reports.

The modelled source locations for each operation were placed according to the mine plan information as presented in each air quality assessment.

## 3.6 Accounting for background dust levels

The cumulative assessment includes the potential dust emissions from the existing and proposed mining operations as outlined in **Section 3.2**. These mining operations are the nearest significant operations and would have a significant contribution to air quality near the Project. Other mining operations in the Hunter Valley as well as other sources associated with various activities would also have a contribution and an allowance for this contribution of other non-modelled dust sources is included.

The contribution from the other non-modelled dust sources to the prevailing background dust levels was estimated by modelling the existing activities during 2012 and comparing the model prediction with the measured values. The values used were the monitoring data collected at various ambient monitoring stations in the area operated by Mt Arthur, Mangoola and the NSW EPA (see **Figure 3-1**).

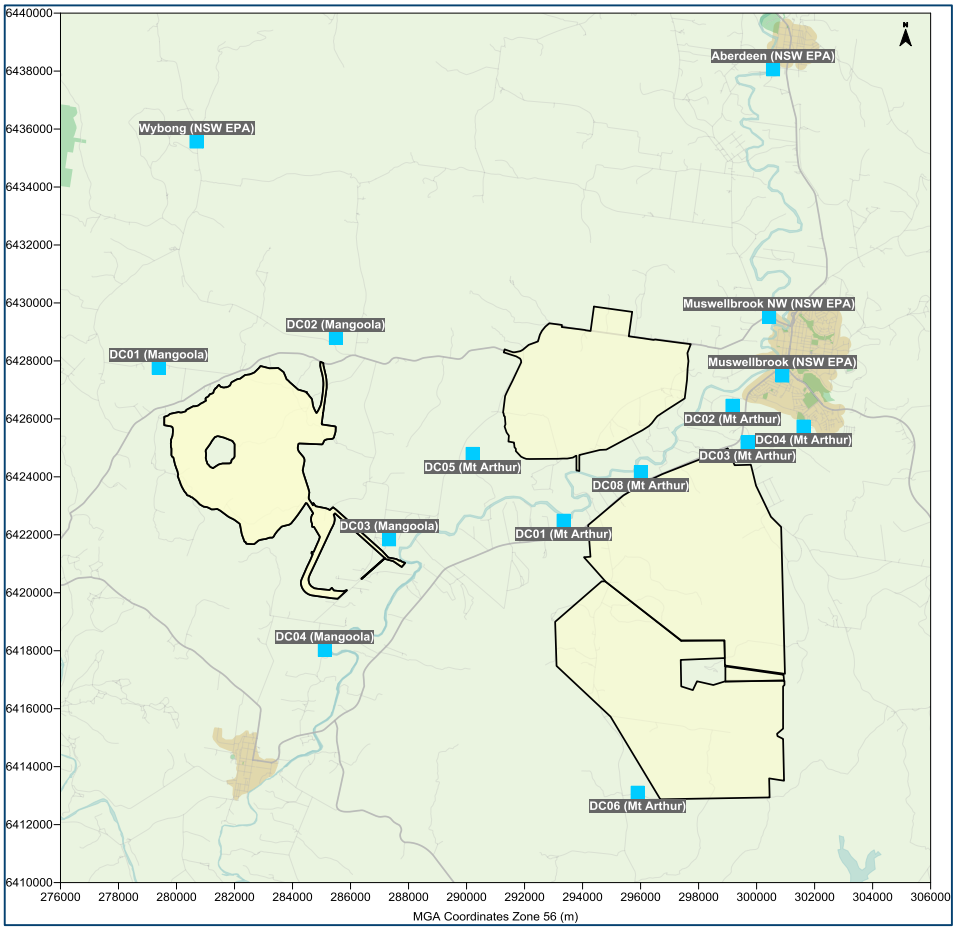


**Figure 3-1: Monitoring locations – $PM_{10}$ monitoring**

A summary of the monitoring data reviewed for this assessment is presented in **Figure 3-2** to **Figure 3-4** for the monitoring station operated by Mt Arthur, Mangoola and NSW EPA respectively. Overall the monitoring data indicate similar trends in $PM_{10}$ levels at the stations during the 2012 calendar year.

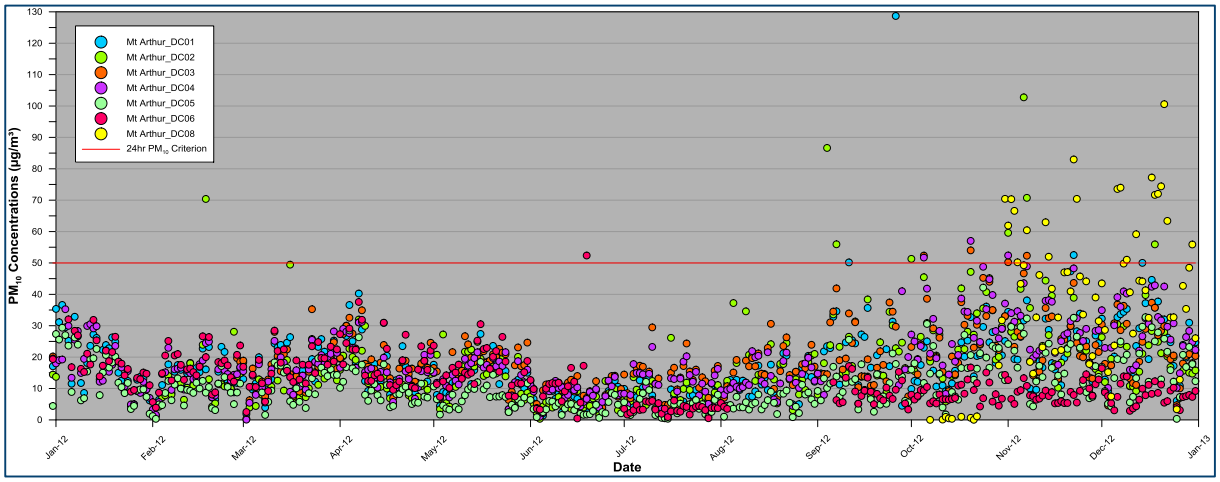


**Figure 3-2: 24-hour average $PM_{10}$ concentrations – Mt Arthur monitors**

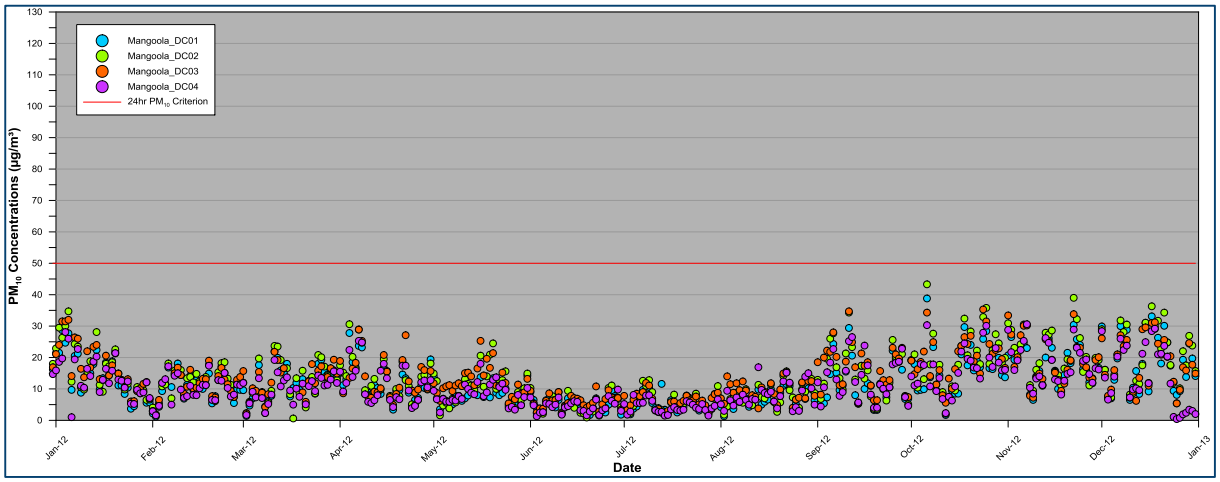


**Figure 3-3: 24-hour average $PM_{10}$ concentrations – Mangoola monitors**

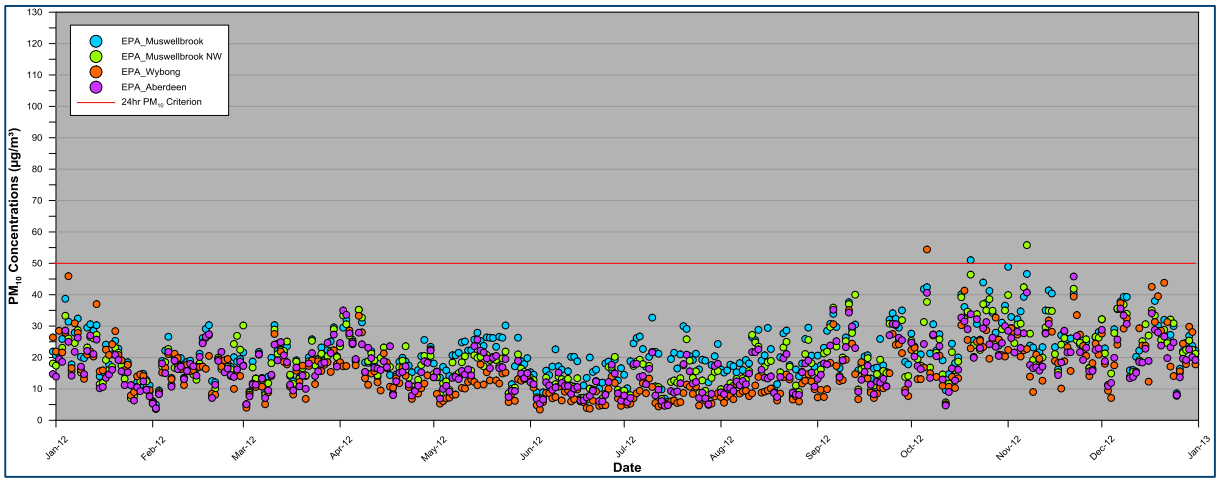


**Figure 3-4: 24-hour average $PM_{10}$ concentrations – NSW EPA monitors**

The difference between the measured and predicted annual average $PM_{10}$ levels is considered to represent the contribution from the other non-modelled dust sources and has been added to the model predictions to account for these sources. (It should be noted that this also accounts for some potential overestimation in the modelling, and the values used are not background dust levels as such.)

The estimated contribution from the other non-modelled dust sources is in reality different at each monitoring station analysed, mainly according to how close the station is to the modelled dust sources (i.e. all coal mines). However a constant level was adopted in this assessment to represent the other non-modelled sources. The adopted level was conservatively chosen as the highest recorded difference between modelled and measured data. We note that for many receptors close to the mining operations the approach will overestimate the potential cumulative impacts. This is because these receptors would be largely influenced by the modelled sources, and not the other non-modelled sources. In this case adding a conservative adjustment to account for non-modelled sources (that would not be a major contributor at these locations) would result in an overestimation of impacts.

Based on the analysis of the modelled results across the modelling domain, the estimated annual average contribution from the other non-modelled dust sources for the area surrounding the Project was established to be approximately 7.6µg/m$^3$.

To account for background levels when assessing total (cumulative) 24-hour average $PM_{10}$ impacts, the Project only (incremental) levels are added to the total measured ambient dust levels (per the NSW EPA contemporaneous assessment guidance). Further details on the approach are provided in **Section 4.5**.

A similar method is applied to estimate the potential $PM_{2.5}$ contribution from the other non-modelled dust sources. The $PM_{2.5}$ monitoring data from the only four available monitoring stations were analysed, the locations of these monitors are shown in **Figure 3-5**.

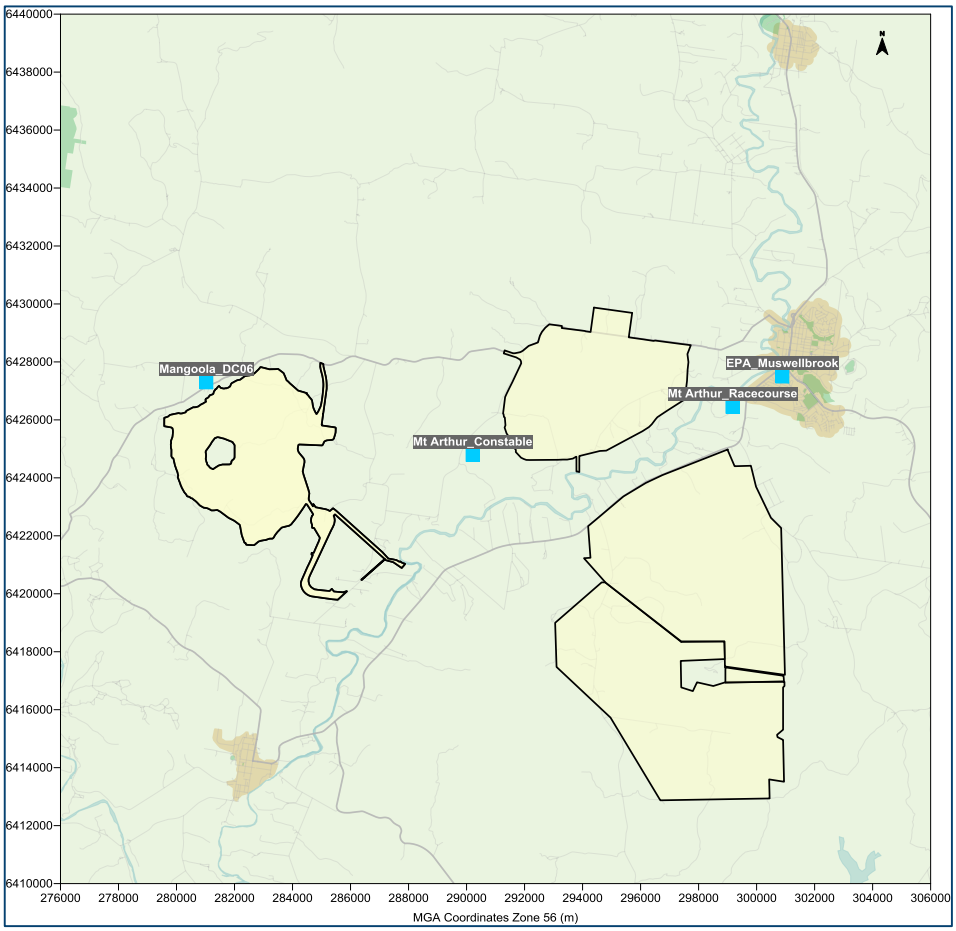


**Figure 3-5: Monitoring locations – $PM_{2.5}$ monitoring**

A summary of $PM_{2.5}$ monitoring data reviewed for this assessment is presented in **Figure 3-6**. The data indicate that the monitoring stations nearer to the mining operations follow a similar daily trend and seasonal trend and appear to be governed by the prevailing background levels.

In contrast, the data from the EPA Muswellbrook monitor appear to be significantly influenced by local anthropogenic sources occurring during the colder months, i.e. wood heater emissions. This trend is clearly seen in **Figure 3-6** and is generally consistent with known data for other rural towns and cities. The trend is caused by the emissions of many domestic wood heaters operating in the town in the Winter. Due to this, the monitoring data from the other stations were used when estimating the contribution from the non-modelled sources at locations away from Muswellbrook.

The calculated $PM_{2.5}$ level to account for non-modelled other sources applied in this assessment is 2.9µg/m$^3$.

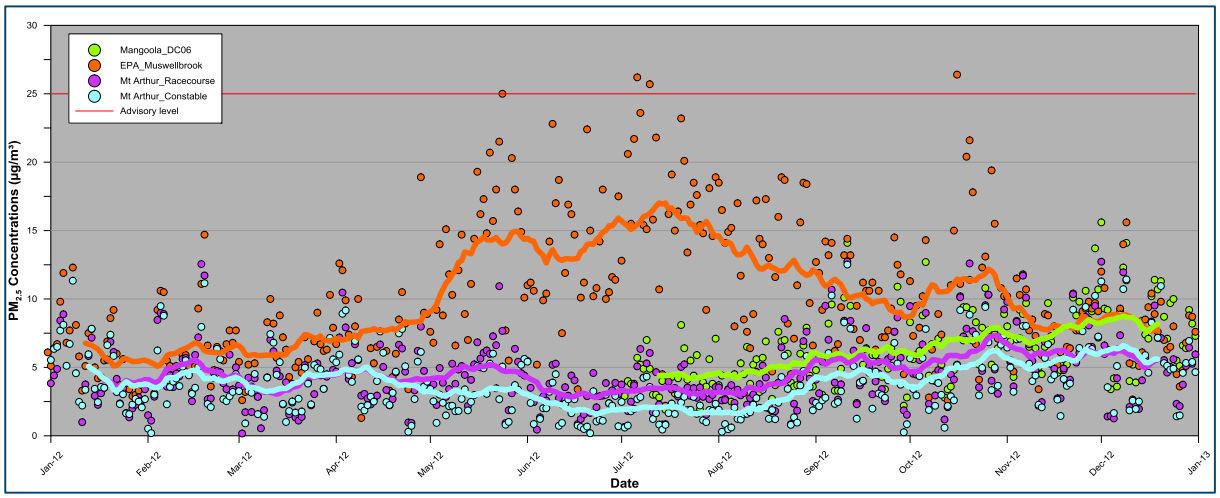


**Figure 3-6: 24-hour average $PM_{2.5}$ concentrations**

# 4 DISPERSION MODELLING RESULTS

The dispersion model predictions for each of the assessed years are presented in this section.

The results show the estimated annual average $PM_{2.5}$ and $PM_{10}$ concentrations for the operations of the Project operating incrementally and cumulatively with other sources including other nearby mining projects, thus representing (the total or cumulative impact) and the potential cumulative 24-hour average $PM_{10}$ concentrations arising due to the operation of the Project.

When trying to assess the total (cumulative) 24-hour average impacts based on model predictions, challenges arise as the predicted impacts are often overestimated by the model's limitations in considering spatial and temporal variability in reality. Furthermore the difficulties associated with identification and quantification of emissions from non-modelled sources over any 24-hour period result in greater overestimations occurring. Due to these factors, the predicted total (cumulative) impacts for maximum 24-hour average $PM_{10}$ concentrations are calculated differently to annual average impacts and have been addressed specifically in **Section 4.5**.

Each of the sensitive receptors shown in **Figure 2-1** and detailed in **Appendix A** were assessed individually as discrete receptors and the predicted results are presented in tabular form for each of the assessed years.

A summary of the annual average $PM_{2.5}$ and $PM_{10}$ concentration isopleths is shown in **Figure 4-1** and **Figure 4-2**. The figures show the change in dust levels as the proposed projects progress over time.

The complete isopleth diagrams of the dispersion modelling results are presented in **Appendix B**. Tabulated results for each of the assessed sensitive receptors are presented in **Appendix C**.

For sources not explicitly included in the model, and to fully account for all cumulative dust levels, the unaccounted fractions of background dust levels (which arise from the other non-modelled sources), were added to the model predictions as described in **Section 3.5** with the results presented in the following sections for each of the assessed years.

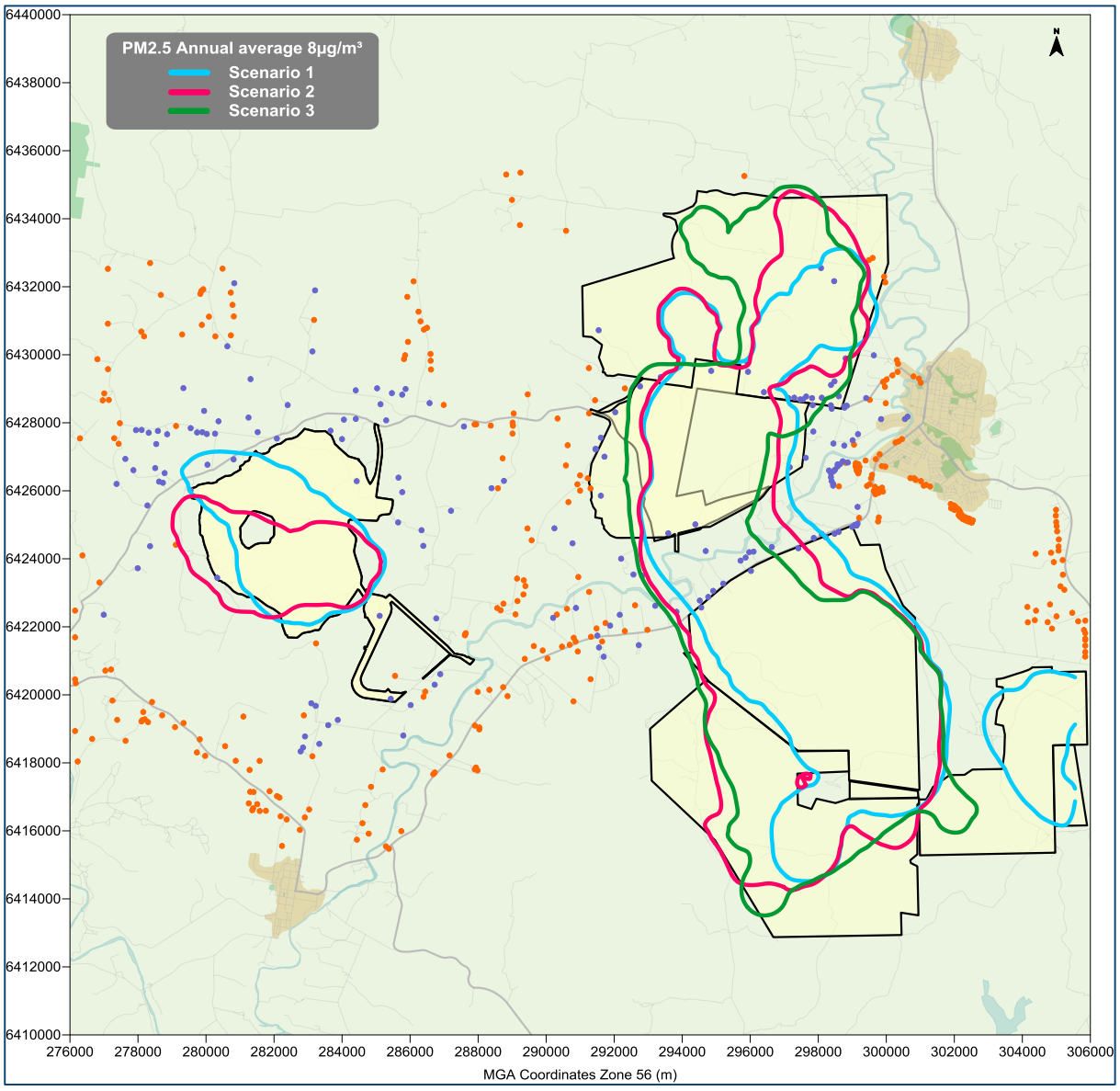


**Figure 4-1: Progression in cumulative $PM_{2.5}$ concentrations over time – all three proposed projects**

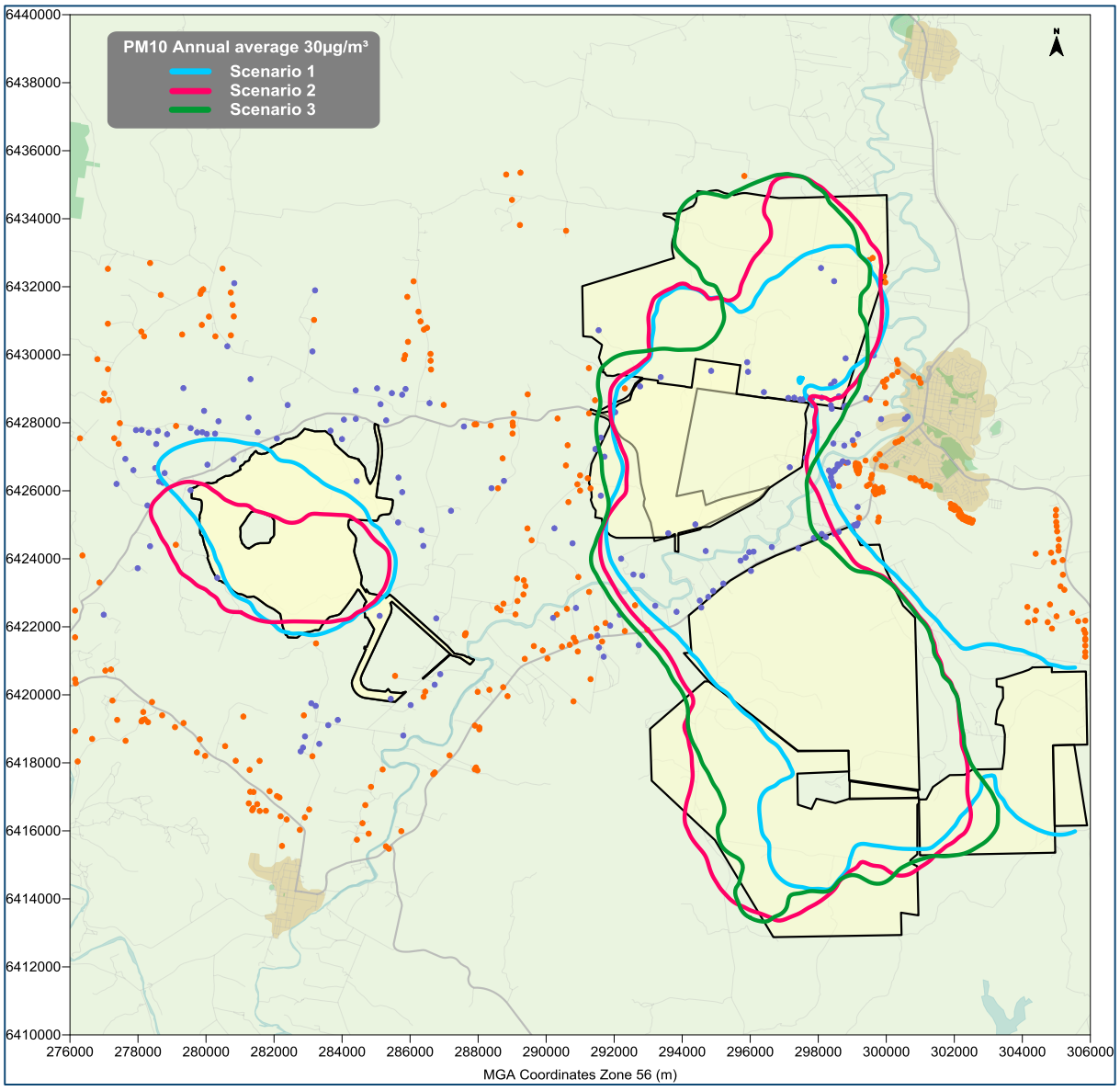


**Figure 4-2: Progression in cumulative $PM_{10}$ concentrations over time – all three proposed projects**

## 4.1 Scenario 1

**Figure B-1** to **Figure B-8** in **Appendix B** present isopleth diagrams of the predicted modelling results for each of the assessed pollutants in Scenario 1.

**Table C-1** and **Table C-2** in **Appendix C** present the predicted $PM_{2.5}$ and $PM_{10}$ concentrations at each of the sensitive receptors respectively, the values presented in bold indicate predicted values above the relevant criteria.

### 4.1.1 Predicted annual average $PM_{2.5}$ concentrations

**Figure B-1**, **Figure B-3** and **Figure B-5** show the predicted annual average $PM_{2.5}$ concentrations for Mt Arthur, Bengalla and Mangoola respectively in Scenario 1.

The results in **Table C-1** indicate that nine sensitive receptors are predicted to experience an annual average incremental concentration above the advisory reporting standard of 8µg/m$^3$. All of these receptors are mine owned.

**Figure B-7** shows the predicted total cumulative annual average $PM_{2.5}$ impact from all the mines and other sources. The results in **Table C-1** indicate that 23 receptors; M222, M224, M225, M227, M228, M266, M267, M268, M286 to M298, M440 and M471 are predicted to experience an annual average cumulative concentration above 8µg/m$^3$ in Scenario 1. All of these receptors are mine owned.

### 4.1.2 Predicted annual average $PM_{10}$ concentrations

**Figure B-2**, **Figure B-4** and **Figure B-6** show the predicted annual average $PM_{10}$ concentrations for Mt Arthur, Bengalla and Mangoola respectively in Scenario 1. **Figure B-8** shows the predicted total impact from all the mines and other sources.

The results in **Table C-2** indicate that one privately owned receptor; P45, and 48 mine owned receptors; M42, M221 to M229, M231 to M233, M239, M240, M253, M256, M265 to M270, M274, M275, M282 to M300, M308, M414, M440 and M471 are predicted to experience total annual average $PM_{10}$ concentration above the relevant criterion of 30µg/m$^3$ in Scenario 1.

## 4.2 Scenario 2

**Figure B-9** to **Figure B-16** in **Appendix B** present isopleth diagrams of the predicted modelling results for each of the assessed pollutants in Scenario 2.

**Table C-1** and **Table C-2** in **Appendix C** present the predicted $PM_{2.5}$ and $PM_{10}$ concentrations at each of the sensitive receptors respectively, the values presented in bold indicate predicted values above the relevant criteria.

### 4.2.1 Predicted annual average $PM_{2.5}$ concentrations

**Figure B-9**, **Figure B-11** and **Figure B-13** show the predicted annual average $PM_{2.5}$ concentrations for Mt Arthur, Bengalla and Mangoola respectively in Scenario 2.

The results in **Table C-1** indicate that 11 sensitive receptors are predicted to experience annual average incremental concentrations above the advisory reporting standard of 8µg/m$^3$. All of these receptors are mine owned.

**Figure B-15** shows the predicted total cumulative impact from all the mines and other sources. The results in **Table C-1** indicate that 17 receptors; M227, M228, M266 to M268, M288 to M298 and M474 are predicted to experience annual average $PM_{2.5}$ concentrations above 8µg/m$^3$ in Scenario 2. All of these receptors are mine owned.

### 4.2.2 Predicted annual average $PM_{10}$ concentrations

**Figure B-10**, **Figure B-12** and **Figure B-14** show the predicted annual average $PM_{10}$ concentrations for Mt Arthur, Bengalla and Mangoola respectively in Scenario 2. **Figure B-16** shows the predicted total impact from all the mines and other sources.

The results in **Table C-2** indicate that five privately owned receptors; Receptors P29, P45, P218, P219 and P311, and 43 mine owned receptors M42, M221 to M229, M231 to M233, M239, M240, M244, M265 to M270, M274, M275, M284 to M300, M414 and M474 are predicted to experience total annual average $PM_{10}$ concentration above the relevant criterion of 30µg/m$^3$ in Scenario 2.

## 4.3 Scenario 3

**Figure B-17** to **Figure B-24** in **Appendix B** present isopleth diagrams of the predicted modelling results for each of the assessed pollutants in Scenario 3.

**Table C-1** and **Table C-2** in **Appendix C** present the predicted $PM_{2.5}$ and $PM_{10}$ concentrations at each of the sensitive receptors respectively, the values presented in bold indicate predicted values above the relevant criteria.

### 4.3.1 Predicted annual average $PM_{2.5}$ concentrations

**Figure B-17** and **Figure B-19** show the predicted annual average $PM_{2.5}$ concentrations for Mt Arthur and Bengalla respectively in Scenario 3.

The results in **Table C-1** indicate that eight sensitive receptors are predicted to experience an annual average concentration above the advisory reporting standard of 8µg/m$^3$. All of these receptors are mine owned.

**Figure B-21** shows the predicted total cumulative impact from all the mines and other sources. The results in **Table C-1** indicate that 31 mine owned receptors; M221 to M228, M231 to M233, M239, to M242, M244, M266 to M268, M275, M289 to M299 are predicted to experience annual average $PM_{2.5}$ concentrations above 8µg/m$^3$ in Scenario 3. All of these receptors are mine owned.

### 4.3.2 Predicted annual average $PM_{10}$ concentrations

**Figure B-18** and **Figure B-20** show the predicted annual average $PM_{10}$ concentrations for Mt Arthur and Bengalla respectively in Scenario 3. **Figure B-22** shows the predicted total impact from all the mines and other sources.

The results in **Table C-2** indicate that three privately owned receptors; P29, P30, and P45, and 49 mine owned receptors; M42, M221 to M229, M231 to M235, M239 to M246, M253, M256, M265 to M270, M272 to M275, M287 to M300 are predicted to experience a total annual average $PM_{10}$ concentration above the relevant criterion of 30µg/m$^3$ in Scenario 3.

## 4.4 Tabulated summary of results

**Table 4-1** and **Table 4-2** summarise the sensitive receptors where impacts are predicted to exceed the relevant advisory standard or assessment criterion for all scenarios.

**Table 4-1: Summary of modelled predictions where predicted impacts exceed annual average $PM_{2.5}$ advisory standard for all scenarios**

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Advisory - 8µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| M221()(M2)() | 0.6 | 2.9 | 0.1 | 7.2 | 0.5 | 3.5 | 0.0 | 7.8 | 0.4 | 8.0 | - | **11.7** |
| M222()(M3)() | 0.5 | 6.0 | 0.0 | **10.2** | 0.4 | 3.8 | 0.0 | 8.3 | 0.3 | 4.9 | - | **9.0** |
| M223()(M4)() | 0.4 | 3.2 | 0.0 | 8.2 | 0.4 | 2.2 | 0.0 | 7.3 | 0.3 | 1.7 | - | **8.7** |
| M224()(M5)() | 0.4 | 4.8 | 0.0 | **9.7** | 0.4 | 3.3 | 0.0 | 8.4 | 0.3 | 2.3 | - | **9.0** |
| M225()(M6)() | 0.5 | 5.0 | 0.0 | **9.8** | 0.4 | 3.1 | 0.0 | 8.3 | 0.4 | 2.0 | - | **9.0** |
| M226()(M7)() | 0.5 | 2.3 | 0.0 | 6.9 | 0.4 | 1.6 | 0.0 | 6.7 | 0.3 | 1.3 | - | **15.4** |
| M227()(M8)() | 0.1 | 0.2 | 0.0 | **8.6** | 0.1 | 0.2 | 0.0 | **17.6** | 0.1 | 0.1 | - | **14.5** |
| M228()(M9)() | 0.1 | 0.2 | 0.0 | **115** | 0.1 | 0.2 | 0.0 | **49.3** | 0.1 | 0.2 | - | **51.3** |
| M231()(M12)() | 0.4 | 1.7 | 0.0 | 6.1 | 0.4 | 1.2 | 0.0 | 6.1 | 0.3 | 1.0 | - | **15.1** |
| M232()(M13)() | 0.3 | 0.8 | 0.0 | 6.1 | 0.3 | 0.7 | 0.0 | 7.4 | 0.2 | 0.6 | - | **10.8** |
| M233()(M14)() | 0.3 | 0.9 | 0.0 | 6.0 | 0.3 | 0.7 | 0.0 | 7.0 | 0.2 | 0.6 | - | **11.0** |
| M239()(M19)() | 0.4 | 2.0 | 0.0 | 6.4 | 0.4 | 1.4 | 0.0 | 6.3 | 0.3 | 1.1 | - | **19.7** |
| M240()(M20)() | 0.4 | 1.8 | 0.0 | 6.3 | 0.4 | 1.3 | 0.0 | 6.3 | 0.3 | 1.1 | - | **16.7** |
| M241()(M21)() | 0.4 | 1.5 | 0.0 | 5.8 | 0.4 | 1.1 | 0.0 | 5.9 | 0.3 | 0.9 | - | **13.0** |
| M242()(M22)() | 0.4 | 1.3 | 0.0 | 5.7 | 0.4 | 1.0 | 0.0 | 5.8 | 0.3 | 0.9 | - | **10.1** |
| M244()(M24)() | 0.4 | 1.4 | 0.0 | 5.9 | 0.4 | 1.1 | 0.0 | 6.0 | 0.3 | 0.9 | - | **10.1** |
| M266()(M47)() | 4.1 | **10.7** | 0.1 | **18.1** | 3.5 | 6.8 | 0.1 | **13.4** | 2.3 | **8.7** | - | **14.1** |
| M267()(M48)() | 3.2 | 5.0 | 0.1 | **11.5** | 3.4 | 4.9 | 0.1 | **11.5** | 2.6 | 7.1 | - | **12.8** |
| M268()(M49)() | 5.5 | 3.6 | 0.1 | **12.4** | 6.3 | 2.6 | 0.1 | **12.1** | 4.6 | 2.8 | - | **10.5** |
| M275()(M57)() | 0.6 | 2.6 | 0.1 | 6.5 | 0.5 | 3.0 | 0.0 | 6.8 | 0.5 | 5.2 | - | **8.9** |
| M286()(M69)() | 4.5 | 1.3 | 0.1 | **9.3** | 2.7 | 1.1 | 0.1 | 7.1 | 1.5 | 1.0 | - | 5.9 |
| M287()(M70)() | **9.7** | 1.4 | 0.1 | **14.5** | 4.0 | 1.1 | 0.1 | 8.4 | 1.9 | 1.1 | - | 6.3 |
| M288()(M71)() | **11.4** | 1.9 | 0.1 | **16.7** | 7.6 | 1.5 | 0.1 | **12.3** | 2.6 | 1.4 | - | 7.3 |
| M289()(M72)() | **15.7** | 2.1 | 0.1 | **21.2** | **13.3** | 1.7 | 0.1 | **18.2** | 4.5 | 1.5 | - | **9.3** |
| M290()(M73)() | **15.6** | 2.1 | 0.1 | **21.1** | **12.8** | 1.8 | 0.1 | **17.7** | 5.0 | 1.6 | - | **9.9** |
| M291()(M74)() | **18.4** | 2.0 | 0.1 | **23.7** | **14.2** | 1.6 | 0.1 | **19.0** | 7.1 | 1.5 | - | **11.8** |
| M292()(M75)() | **15.7** | 2.0 | 0.1 | **21.0** | **13.3** | 1.6 | 0.1 | **18.1** | **8.9** | 1.5 | - | **13.6** |
| M293()(M76)() | **52.6** | 1.4 | 0.1 | **57.4** | **34.9** | 1.2 | 0.1 | **39.2** | **18.7** | 1.1 | - | **23.1** |
| M294()(M77)() | **9.6** | 1.5 | 0.1 | **14.4** | **30.9** | 1.2 | 0.1 | **35.3** | **23.7** | 1.1 | - | **27.9** |
| M295()(M78)() | 6.5 | 1.4 | 0.1 | **11.2** | **33.0** | 1.2 | 0.1 | **37.3** | **29.7** | 1.2 | - | **34.0** |
| M296()(M79)() | 5.6 | 1.3 | 0.1 | **10.2** | **48.7** | 1.1 | 0.1 | **52.9** | **33.7** | 1.1 | - | **37.9** |
| M297()(M80)() | 4.5 | 1.2 | 0.1 | **9.0** | **12.8** | 1.1 | 0.1 | **17.0** | **16.2** | 1.2 | - | **20.5** |
| M298()(M81)() | 4.5 | 1.1 | 0.1 | **8.8** | **12.4** | 1.0 | 0.1 | **16.5** | **15.2** | 1.1 | - | **19.4** |
| M299()(M82)() | 2.7 | 1.0 | 0.1 | 7.0 | 3.9 | 1.0 | 0.1 | 8.0 | 4.5 | 1.2 | - | **8.7** |
| M440()()(82) | 0.3 | 0.1 | 7.7 | **11.0** | 0.4 | 0.1 | 1.0 | 4.3 | 0.4 | 0.1 | - | 3.4 |
| M471()()(33E) | 0.3 | 0.1 | 5.9 | **9.2** | 0.4 | 0.1 | 0.6 | 3.9 | 0.4 | 0.1 | - | 3.4 |
| M474()()(33H) | 0.2 | 0.0 | 1.8 | 5.0 | 0.3 | 0.0 | **10.8** | **14.1** | 0.3 | 0.1 | - | 3.3 |

**Table 4-2: Summary of modelled predictions where predicted impacts exceed annual average $PM_{10}$ assessment criteria for all scenarios**

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Air quality criteria - 30µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P29(210)(118)() | 13.1 | 5.0 | 1.3 | 27.9 | 18.0 | 5.0 | 1.0 | **32.2** | 20.6 | 6.8 | - | **35.7** |
| P30(211)(119)() | 10.9 | 4.3 | 1.3 | 24.9 | 16.0 | 4.4 | 1.1 | 29.6 | 18.8 | 5.5 | - | **32.6** |
| M42(212)(M50)() | 18.8 | 8.1 | 1.2 | **37.0** | 25.6 | 8.0 | 0.9 | **42.7** | 26.9 | 11.7 | - | **47.1** |
| P45(264)(168)() | 4.4 | 17.3 | 0.5 | **31.9** | 3.9 | 20.4 | 0.3 | **34.1** | 3.6 | 28.7 | - | **41.5** |
| P218()(292W)() | 0.7 | 1.0 | 0.2 | 25.0 | 0.7 | 0.9 | 0.1 | **38.7** | 0.6 | 0.8 | - | 27.5 |
| P219()(292E)() | 0.7 | 1.0 | 0.2 | 22.6 | 0.7 | 0.9 | 0.1 | **35.6** | 0.6 | 0.8 | - | 26.4 |
| M221()(M2)() | 4.0 | 22.7 | 0.4 | **40.2** | 3.6 | 27.7 | 0.3 | **45.0** | 3.0 | **63.1** | - | **76.5** |
| M222()(M3)() | 3.3 | **45.9** | 0.3 | **63.8** | 2.9 | 29.2 | 0.2 | **48.4** | 2.4 | **37.8** | - | **54.5** |
| M223()(M4)() | 2.7 | 24.4 | 0.3 | **47.9** | 2.5 | 16.4 | 0.2 | **41.1** | 2.1 | 13.0 | - | **52.0** |
| M224()(M5)() | 3.0 | **36.9** | 0.3 | **59.7** | 2.8 | 25.5 | 0.2 | **49.4** | 2.3 | 17.6 | - | **53.8** |
| M225()(M6)() | 3.5 | **38.3** | 0.3 | **60.6** | 3.2 | 24.1 | 0.2 | **48.8** | 2.6 | 15.5 | - | **54.0** |
| M226()(M7)() | 3.3 | 17.9 | 0.3 | **38.1** | 3.0 | 12.2 | 0.2 | **36.0** | 2.4 | 9.7 | - | **104.5** |
| M227()(M8)() | 1.0 | 1.5 | 0.2 | **52.0** | 0.9 | 1.2 | 0.1 | **119.8** | 0.8 | 1.0 | - | **97.5** |
| M228()(M9)() | 1.0 | 1.6 | 0.2 | **926.2** | 0.9 | 1.3 | 0.1 | **380.6** | 0.8 | 1.1 | - | **398.3** |
| M229()(M10)() | 1.6 | 4.1 | 0.2 | **32.3** | 1.5 | 3.6 | 0.2 | **47.3** | 1.2 | 3.4 | - | **48.1** |
| M231()(M12)() | 3.1 | 12.8 | 0.3 | **31.8** | 2.8 | 9.2 | 0.2 | **31.9** | 2.2 | 7.7 | - | **102.0** |
| M232()(M13)() | 2.1 | 6.4 | 0.3 | **31.8** | 1.9 | 5.2 | 0.2 | **41.8** | 1.6 | 4.6 | - | **68.1** |
| M233()(M14)() | 2.2 | 7.0 | 0.3 | **31.1** | 2.0 | 5.5 | 0.2 | **39.1** | 1.7 | 4.9 | - | **70.1** |
| M234()(M15)() | 2.3 | 6.7 | 0.3 | 26.6 | 2.1 | 5.3 | 0.2 | 30.4 | 1.7 | 4.7 | - | **37.8** |
| M235()(M16)() | 2.4 | 6.6 | 0.3 | 25.2 | 2.2 | 5.2 | 0.2 | 27.2 | 1.8 | 4.7 | - | **30.6** |
| M239()(M19)() | 3.2 | 15.1 | 0.3 | **34.3** | 2.9 | 10.6 | 0.2 | **33.3** | 2.3 | 8.6 | - | **139.3** |
| M240()(M20)() | 3.2 | 13.7 | 0.3 | **33.1** | 2.9 | 9.8 | 0.2 | **32.9** | 2.3 | 8.1 | - | **114.7** |
| M241()(M21)() | 2.9 | 11.3 | 0.3 | 29.4 | 2.6 | 8.3 | 0.2 | 29.8 | 2.1 | 6.9 | - | **85.8** |
| M242()(M22)() | 2.8 | 10.3 | 0.3 | 28.5 | 2.5 | 7.6 | 0.2 | 29.3 | 2.0 | 6.5 | - | **63.0** |
| M243()(M23)() | 2.6 | 8.6 | 0.3 | 27.2 | 2.3 | 6.6 | 0.2 | 29.1 | 1.9 | 5.7 | - | **47.8** |
| M244()(M24)() | 3.1 | 11.0 | 0.3 | 30.0 | 2.8 | 8.0 | 0.2 | **30.8** | 2.2 | 6.9 | - | **62.5** |
| M245()(M25)() | 2.6 | 8.0 | 0.3 | 26.8 | 2.4 | 6.1 | 0.2 | 29.0 | 1.9 | 5.4 | - | **38.5** |
| M246()(M26)() | 2.7 | 8.0 | 0.3 | 26.7 | 2.4 | 6.1 | 0.2 | 28.7 | 2.0 | 5.5 | - | **37.0** |
| M253()(M33)() | 4.2 | 12.1 | 0.3 | **30.7** | 3.7 | 9.1 | 0.2 | 30.0 | 2.8 | 7.9 | - | **41.1** |
| M256()(M36)() | 6.1 | 14.7 | 0.4 | **33.3** | 5.2 | 10.9 | 0.3 | 29.8 | 3.9 | 9.4 | - | **32.8** |
| M265()(M46)() | 7.8 | 21.8 | 0.4 | **41.6** | 6.7 | 15.4 | 0.3 | **34.6** | 4.8 | 12.7 | - | **34.3** |
| M266()(M47)() | **31.0** | **81.0** | 0.8 | **122.6** | 26.0 | **52.1** | 0.6 | **87.7** | 17.0 | **66.7** | - | **93.2** |
| M267()(M48)() | 24.6 | **37.2** | 0.9 | **72.1** | 25.6 | **37.7** | 0.7 | **72.6** | 19.5 | **54.3** | - | **82.7** |
| M268()(M49)() | **42.0** | 26.4 | 0.8 | **79.1** | **47.8** | 19.4 | 0.6 | **76.8** | **35.2** | 20.9 | - | **65.5** |
| M269()(M51)() | 17.2 | 6.6 | 1.2 | **33.9** | 22.6 | 6.5 | 0.9 | **38.2** | 24.5 | 9.5 | - | **42.4** |
| M270()(M52)() | 16.8 | 5.9 | 1.3 | **32.8** | 21.0 | 5.6 | 1.0 | **35.8** | 21.8 | 8.4 | - | **38.6** |
| M272()(M54)() | 8.8 | 7.5 | 0.8 | 26.3 | 7.8 | 7.8 | 0.5 | 24.7 | 6.9 | 15.4 | - | **30.8** |
| M273()(M55)() | 7.2 | 9.6 | 0.7 | 26.6 | 6.2 | 9.7 | 0.5 | 25.1 | 5.6 | 17.0 | - | **31.2** |
| M274()(M56)() | 5.6 | 14.8 | 0.5 | **30.5** | 4.8 | 17.2 | 0.4 | **31.5** | 4.4 | 21.8 | - | **35.2** |
| M275()(M57)() | 4.4 | 19.9 | 0.4 | **35.2** | 3.9 | 23.4 | 0.3 | **37.9** | 3.5 | **41.1** | - | **54.1** |
| M282()(M65)() | 14.9 | 7.3 | 0.4 | **34.1** | 11.3 | 6.6 | 0.3 | 28.3 | 8.4 | 6.2 | - | 25.4 |
| M283()(M66)() | 17.2 | 7.5 | 0.4 | **36.7** | 12.6 | 6.8 | 0.3 | 29.9 | 9.2 | 6.4 | - | 26.6 |
| M284()(M67)() | 24.0 | 8.1 | 0.5 | **44.2** | 15.8 | 7.2 | 0.4 | **33.6** | 10.7 | 6.9 | - | 28.7 |
| M285()(M68)() | 24.2 | 9.0 | 0.5 | **45.1** | 16.2 | 7.8 | 0.4 | **34.7** | 10.5 | 7.4 | - | 29.2 |
| M286()(M69)() | **34.1** | 9.6 | 0.5 | **55.8** | 20.1 | 8.2 | 0.4 | **38.9** | 11.3 | 7.8 | - | 30.2 |
| M287()(M70)() | **74.3** | 10.3 | 0.5 | **96.5** | 30.1 | 8.6 | 0.4 | **49.0** | 13.9 | 8.2 | - | **32.9** |
| M288()(M71)() | **87.1** | 14.2 | 0.6 | **112.7** | **57.0** | 11.5 | 0.5 | **78.6** | 19.8 | 10.2 | - | **40.5** |
| M289()(M72)() | **120.7** | 15.4 | 0.7 | **147.2** | **101.8** | 12.7 | 0.5 | **124.4** | **34.3** | 11.4 | - | **55.9** |

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Air quality criteria - 30µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| M290()(M73)() | **119.8** | 15.9 | 0.7 | **146.9** | **97.8** | 13.2 | 0.5 | **120.7** | **38.1** | 11.9 | - | **60.1** |
| M291()(M74)() | **142.0** | 14.7 | 0.7 | **167.8** | **108.4** | 12.2 | 0.5 | **130.3** | **53.8** | 11.5 | - | **75.2** |
| M292()(M75)() | **121.0** | 14.4 | 0.7 | **146.4** | **101.8** | 11.9 | 0.5 | **123.4** | **68.1** | 11.5 | - | **89.4** |
| M293()(M76)() | **418.1** | 10.6 | 0.7 | **439.7** | **274.9** | 8.8 | 0.5 | **293.3** | **147.8** | 8.5 | - | **165.9** |
| M294()(M77)() | **73.9** | 10.9 | 0.8 | **95.3** | **242.3** | 8.7 | 0.6 | **260.3** | **188.2** | 8.6 | - | **205.7** |
| M295()(M78)() | **50.3** | 10.3 | 0.9 | **70.9** | **257.9** | 8.8 | 0.7 | **276.0** | **236.9** | 9.0 | - | **254.8** |
| M296()(M79)() | **43.5** | 9.4 | 0.9 | **63.1** | **387.2** | 8.3 | 0.7 | **404.8** | **271.4** | 8.3 | - | **288.5** |
| M297()(M80)() | **35.0** | 9.0 | 0.9 | **54.2** | **98.3** | 8.3 | 0.7 | **115.8** | **128.1** | 9.1 | - | **146.0** |
| M298()(M81)() | **34.8** | 7.9 | 0.9 | **52.7** | **95.3** | 7.4 | 0.7 | **112.0** | **120.6** | 7.9 | - | **137.2** |
| M299()(M82)() | 21.0 | 7.3 | 1.1 | **38.1** | 29.8 | 7.1 | 0.9 | **46.1** | **35.0** | 8.5 | - | **52.1** |
| M300()(M83)() | 16.8 | 6.7 | 1.2 | **33.4** | 23.1 | 6.8 | 0.9 | **39.1** | 26.2 | 8.7 | - | **43.3** |
| M308()()(56) | 1.7 | 0.3 | 23.6 | **33.4** | 2.1 | 0.3 | 12.5 | 22.6 | 2.3 | 0.4 | - | 10.4 |
| P311()()(83) | 1.4 | 0.3 | 8.0 | 17.4 | 1.9 | 0.3 | 27.0 | **36.8** | 2.0 | 0.3 | - | 10.0 |
| M414()()(2) | 1.8 | 0.3 | **34.2** | **44.1** | 2.3 | 0.3 | 26.7 | **37.0** | 2.5 | 0.4 | - | 10.6 |
| M440()()(82) | 2.1 | 0.4 | **60.2** | **70.5** | 2.5 | 0.4 | 7.4 | 18.0 | 2.7 | 0.5 | - | 10.9 |
| M471()()(33E) | 2.3 | 0.4 | **45.6** | **56.2** | 2.7 | 0.4 | 4.2 | 15.0 | 3.0 | 0.5 | - | 11.3 |
| M474()()(33H) | 1.4 | 0.3 | 13.7 | 23.1 | 2.0 | 0.3 | **84.6** | **94.6** | 2.1 | 0.3 | - | 10.1 |

## 4.5 Assessment of total (cumulative) 24-hour average $PM_{10}$ concentrations

The NSW EPA contemporaneous assessment method (**NSW DEC, 2005**) was applied to examine the potential maximum total (cumulative) 24-hour average $PM_{10}$ impacts for the Project.

The analysis focused on 11 locations which were chosen to represent the sensitive receptors surrounding the Project. The chosen locations are located around each monitoring station where suitable ambient monitoring data were available in 2012.

**Figure 4-3** shows the locations of each of these monitors in relation to the Project and nearby sensitive receptors. The circled regions around each of the monitoring locations represent the approximate areas where the data from the encircled monitor were applied in the assessment.

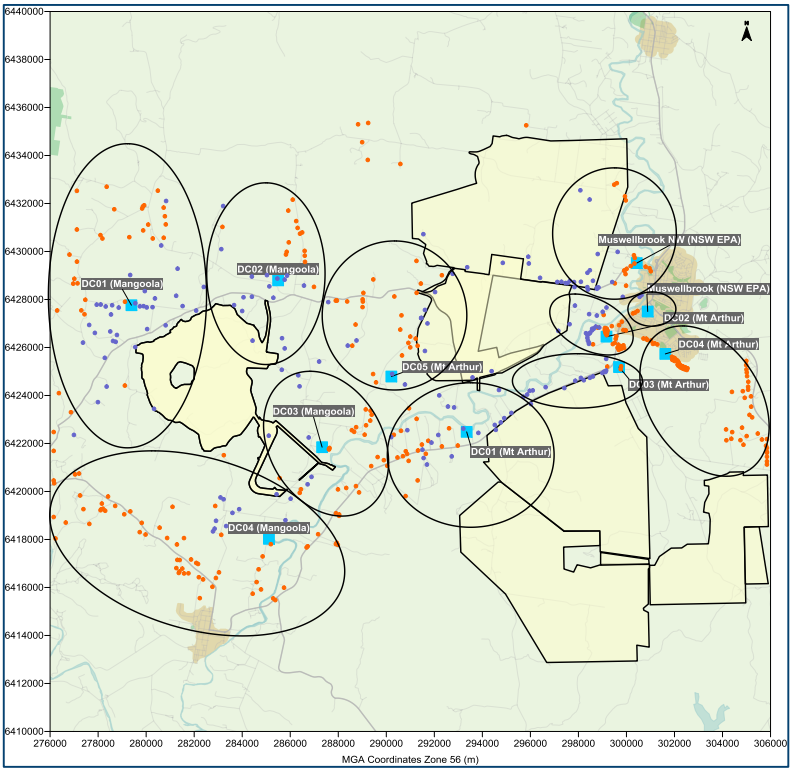


**Figure 4-3: Location for contemporaneous assessment**

Many of the dust monitors are located closer to mining activity than the majority of receptors (i.e. the monitors are generally located in areas with higher dust levels from mining activity than the levels that the majority of the receptors receive), and thus the underlying data at these monitoring locations include dust from existing mining activities and tend to be higher than would occur at the majority of the receptors.

The assessment was done in several stages. The first stage examined potential impact at the actual monitoring location, and where any potential for elevated 24-hour average impacts was identified near a monitoring station (in the first stage of the assessment), each individual receptor in the area was progressively examined in more detail through an individual assessment of potential impact using the NSW EPA contemporaneous assessment method, as described in Section 11 of the NSW EPA Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (**NSW DEC, 2005**).

The NSW EPA contemporaneous assessment approach requires the addition of the measured dust level to the predicted dust level each day to determine the total impact. This approach accounts for spatial and temporal variability in dust levels better than the maximum level approach which simply adds the maximum measured levels with the maximum predicted level (which may occur on a different day).

All of the mines examined operated during 2012, and the monitoring data in the areas would generally include some contribution from the mines. To conduct a reliable assessment, it is important to account for the existing contribution to dust levels from mining activities in the cumulative assessment. Modelling of the known mining operational activity for each mine for the 2012 period was conducted to determine the existing contribution to the measured levels of dust in the vicinity of each monitor. This information allows the cumulative assessment to avoid potential double counting of mining emissions in both the measured data and in the predicted levels, and to thus make a more reliable prediction of the likely cumulative total dust level.

The receptors in the cumulative 24-hour $PM_{10}$ impact assessment were examined on the basis of likely risk of impact.

**Table 4-3** provides a summary of the findings of the first stage of the contemporaneous 24-hour average impact assessment at each monitoring location.

**Table 4-3: Contemporaneous assessment – maximum number of additional days above 24-hour average $PM_{10}$ criterion depending on background level at monitoring sites – first stage assessment**

| Location | Scenario 1 | Scenario 2 | Scenario 3 |
|---|---|---|---|
| Mt Arthur DC01 | 4 | 9 | 32 |
| Mt Arthur DC02 | 0 | 0 | 0 |
| Mt Arthur DC03 | 1 | 0 | 0 |
| Mt Arthur DC04 | 0 | 0 | 0 |
| Mt Arthur DC05 | 0 | 0 | 4 |
| Mangoola DC01 | 4 | 1 | N/A |
| Mangoola DC02 | 0 | 0 | N/A |
| Mangoola DC03 | 0 | 0 | N/A |
| Mangoola DC04 | 0 | 0 | N/A |
| Muswellbrook | 0 | 0 | 0 |
| Muswellbrook NW | 0 | 0 | 0 |

The first stage results in **Table 4-3** indicate that there would not be any additional systemic exceedances (greater than five days of exceedance) arising at any representative location, except in the vicinity of monitoring location Mt Arthur DC01 in Scenario 2 and Scenario 3. It is important to note that because the assessment locations are generally in positions where maximum impacts are most likely to occur, it follows that no greater risk of impacts can generally arise at receptors further from the mine than the monitoring locations assessed in **Table 4-3**.

Due to the identified potential for exceedances in the vicinity of the Mt Arthur DC01 monitor, a further second stage detailed assessment of the potential cumulative 24-hour average impacts was conducted at each receptor in the vicinity of that monitoring location. Each receptor location was progressively assessed starting with those receptors nearest the mine and moving further away. The assessment was completed once no impacts were found at any receptor in the vicinity.

The results of the detailed contemporaneous assessment at individual receptors are summarised in **Table 4-4**.

**Table 4-4: Further contemporaneous assessment – other receptors in the vicinity of monitoring station Mt Arthur DC01 – maximum number of additional days above 24-hour average $PM_{10}$ criterion – second stage assessment**

| Location | Scenario 2 | Scenario 3 |
|---|---|---|
| P29 | 8 | 15 |
| P30 | 5 | 15 |
| P33 | 4 | 5 |
| P34 | 4 | 4 |
| P43 | 2 | 6 |
| P55 | 4 | 8 |
| P56 | 2 | 3 |
| P202 | 3 | 7 |

The results in **Table 4-4** indicate that:

- Receptor P29 is likely to experience more than five days of additional cumulative impacts in Scenario 2. We note that this receptor is within the existing zone of acquisition for Mt Arthur.
- in Scenario 3, there is potential that more than five days of additional cumulative impact would arise at receptors P29, P30 P43, P55 and P202. At the receptors further from mining activity (receptors P33, P34 and P56) the assessment found that it is unlikely that more than five days of additional cumulative impact would arise.

It is important to note that potential impacts at receptors (near the receptors shown) that are not listed in **Table 4-4** would be lower that the tabled results.

# 5 SUMMARY AND CONCLUSIONS

This study has examined the potential combined dust impacts which may arise from the proposed modifications to the Mt Arthur, Bengalla and Mangoola coal mines.

The study found that six privately owned receptors; P29, P30, P45, P218, P219 and P311 would be subject to total annual average $PM_{10}$ impacts above the relevant criterion.

A cumulative assessment of 24-hour average $PM_{10}$ dust levels indicates that due to the Project, additional impact may occur for a number of privately owned receptors. The assessment identified that there is potential that more than five days of additional cumulative impact would arise at private receptors P29, P30 P43, P55 and P202.

The study has also identified a number mine owned properties that are predicted to experience levels above the relevant criterion for the assessment dust metrics. The impacts at these receptors are listed in the report and are identified in the tabled data in bold font.

# 6 REFERENCES

NSW DEC (2005)

"Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales", Department of Environment and Conservation (NSW), August 2005.

PAEHolmes (2013)

"Air Quality and Greenhouse Gas Assessment – Mt Arthur Coal Open Cut Modification", prepared by PAEHolmes on behalf of Hunter Valley Energy Coal Pty Ltd, January 2013

TAS (2013a)

"Air Quality and Greenhouse Gas Assessment – Mangoola Coal", prepared by Todoroski Air Sciences on behalf of EMGA Mitchell McLennan, May 2013

TAS (2013b)

"Air Quality and Greenhouse Gas Impact Assessment – Continuation of Bengalla Mine", prepared by Todoroski Air Sciences on behalf of Hansen Bailey, July 2013

# Appendix A

## *Sensitive Receptors*

**Table A-1: Sensitive receptor locations**

| Receptor ID | Easting (m) | Northing (m) | Mt Arthur ID | Bengalla ID | Mangoola ID | | Receptor ID | Easting (m) | Northing (m) | Mt Arthur ID | Bengalla ID | Mangoola ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P1 | 299201 | 6425202 | 6 | 66 | - | | M244 | 297836 | 6428518 | - | M24 | - |
| M2 | 299156 | 6425525 | 8 | 64 | - | | M245 | 298371 | 6428513 | - | M25 | - |
| M3 | 298868 | 6426831 | 29 | 44 | - | | M246 | 298396 | 6428412 | - | M26 | - |
| P4 | 299780 | 6425216 | 49a | 87N | - | | M247 | 299408 | 6428726 | - | M27 | - |
| P5 | 299759 | 6425096 | 49b | 87S | - | | M248 | 298838 | 6428501 | - | M28 | - |
| P6 | 298804 | 6426824 | 28 | 43 | - | | M249 | 298772 | 6428445 | - | M29 | - |
| P7 | 299189 | 6426608 | 20 | 53 | - | | M250 | 299847 | 6428107 | - | M30 | - |
| P8 | 299193 | 6426582 | 21 | 57 | - | | M251 | 300626 | 6428178 | - | M31 | - |
| P9 | 299174 | 6426549 | 22 | 59 | - | | M252 | 300548 | 6428110 | - | M32 | - |
| P10 | 299175 | 6426512 | 23 | 60 | - | | M253 | 297855 | 6427743 | - | M33 | - |
| P11 | 299136 | 6426584 | 24 | 58 | - | | M254 | 298445 | 6427389 | - | M34 | - |
| P12 | 299138 | 6426622 | 25 | 51 | - | | M255 | 298765 | 6427328 | - | M35 | - |
| P13 | 299122 | 6426655 | 26 | 52 | - | | M256 | 297632 | 6426969 | - | M36 | - |
| P14 | 299197 | 6426672 | 18 | 55 | - | | M257 | 298639 | 6426783 | - | M38 | - |
| P15 | 299206 | 6426702 | 17 | 50 | - | | M258 | 298570 | 6426778 | - | M39 | - |
| P16 | 299153 | 6426716 | 16 | 48 | - | | M259 | 298568 | 6426715 | - | M40 | - |
| P17 | 299125 | 6426723 | 15 | 47 | - | | M260 | 298490 | 6426617 | - | M41 | - |
| P18 | 299098 | 6426730 | 14 | 49 | - | | M261 | 298457 | 6426579 | - | M42 | - |
| P19 | 299580 | 6426467 | 13 | 62 | - | | M262 | 298315 | 6426596 | - | M43 | - |
| P20 | 299551 | 6426363 | 12 | 61 | - | | M263 | 298377 | 6426508 | - | M44 | - |
| P21 | 299512 | 6426192 | 11 | 46 | - | | M264 | 298373 | 6426398 | - | M45 | - |
| M22 | 298437 | 6426150 | 9 | M60 | - | | M265 | 297163 | 6426691 | - | M46 | - |
| P23 | 298607 | 6426131 | 10 | 45 | - | | M266 | 294386 | 6425011 | - | M47 | - |
| P24 | 299103 | 6426810 | 30 | 41 | - | | M267 | 293590 | 6424751 | - | M48 | - |
| P25 | 299051 | 6427356 | 31 | 29 | - | | M268 | 294691 | 6424228 | - | M49 | - |
| P26 | 299178 | 6426785 | 32 | 42 | - | | M269 | 292566 | 6423537 | - | M51 | - |
| P27 | 299391 | 6426889 | 33 | 40 | - | | M270 | 292204 | 6424003 | - | M52 | - |
| P28 | 299985 | 6428573 | 36 | 27E | - | | M271 | 291608 | 6425854 | - | M53 | - |
| P29 | 292613 | 6422632 | 210 | 118 | - | | M272 | 291714 | 6427002 | - | M54 | - |
| P30 | 292977 | 6421911 | 211 | 119 | - | | M273 | 291609 | 6427562 | - | M55 | - |
| M31 | 292164 | 6422353 | 208 | M89 | - | | M274 | 292031 | 6428310 | - | M56 | - |
| M32 | 291881 | 6422035 | 207 | M88 | - | | M275 | 292762 | 6429070 | - | M57 | - |
| P33 | 291745 | 6422110 | 206 | 114 | - | | M276 | 298394 | 6426283 | - | M58 | - |
| P34 | 291481 | 6421952 | 204 | 113 | - | | M277 | 298437 | 6426203 | - | M59 | - |
| P35 | 291319 | 6421705 | 203 | 112S | - | | M278 | 299156 | 6425037 | - | M61 | - |
| P36 | 289898 | 6421304 | 197 | 107 | - | | M279 | 299129 | 6424978 | - | M62 | - |
| P37 | 289638 | 6421433 | 196 | 103 | - | | M280 | 299067 | 6424992 | - | M63 | - |
| P38 | 290930 | 6421274 | 187 | 106 | - | | M281 | 298997 | 6424936 | - | M64 | - |
| M39 | 291553 | 6421392 | 184b | M86 | - | | M282 | 298603 | 6424790 | - | M65 | - |
| M40 | 290205 | 6422263 | 199 | M91 | - | | M283 | 298478 | 6424736 | - | M66 | - |
| M41 | 290876 | 6422553 | 202 | M90 | - | | M284 | 298223 | 6424634 | - | M67 | - |
| M42 | 292824 | 6423499 | 212 | M50 | - | | M285 | 298102 | 6424730 | - | M68 | - |
| P43 | 290946 | 6423464 | 226 | 120 | - | | M286 | 297868 | 6424613 | - | M69 | - |
| M44 | 288759 | 6426291 | 236 | M96 | - | | M287 | 297414 | 6424309 | - | M70 | - |
| P45 | 292314 | 6429010 | 264 | 168 | - | | M288 | 296634 | 6424345 | - | M71 | - |
| P46 | 288865 | 6419960 | 182 | 92 | 191 | | M289 | 296099 | 6424210 | - | M72 | - |
| P47 | 290804 | 6419806 | 183 | - | 194 | | M290 | 295969 | 6424194 | - | M73 | - |
| P48 | 290039 | 6421068 | 186 | 105 | 228 | | M291 | 295865 | 6424036 | - | M74 | - |

| Receptor ID | Easting (m) | Northing (m) | Mt Arthur ID | Bengalla ID | Mangoola ID | | Receptor ID | Easting (m) | Northing (m) | Mt Arthur ID | Bengalla ID | Mangoola ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P49 | 288331 | 6420146 | 190 | 93 | 104 | | M292 | 295715 | 6423945 | - | M75 | - |
| P50 | 288736 | 6420223 | 191 | 98 | 192 | | M293 | 296022 | 6423642 | - | M76 | - |
| P51 | 289371 | 6421057 | 195 | 102 | 227 | | M294 | 295207 | 6423271 | - | M77 | - |
| P52 | 290692 | 6421470 | 198 | - | 230 | | M295 | 294911 | 6423056 | - | M78 | - |
| P53 | 290865 | 6421565 | 201 | - | 231 | | M296 | 294766 | 6422877 | - | M79 | - |
| M54 | 291506 | 6421741 | 205 | M87 | 233 | | M297 | 294517 | 6422771 | - | M80 | - |
| P55 | 292313 | 6421874 | 209 | 117 | 275 | | M298 | 294560 | 6422567 | - | M81 | - |
| P56 | 290612 | 6422527 | 200 | 110N | 238 | | M299 | 293833 | 6422440 | - | M82 | - |
| P57 | 288662 | 6422483 | 213a | 133N | 125A | | M300 | 293207 | 6422618 | - | M83 | - |
| P58 | 288744 | 6422679 | 213b | 133W | 125B | | M301 | 292724 | 6421461 | - | M84 | - |
| P59 | 288562 | 6422551 | 213c | 133S | 125C | | M302 | 291692 | 6421120 | - | M85 | - |
| P60 | 289099 | 6422365 | 216 | 130 | 240 | | M303 | 290243 | 6424896 | - | M93 | - |
| P61 | 289332 | 6422951 | 218a | 126W | 241B | | M304 | 288394 | 6426076 | - | M95 | - |
| P62 | 289390 | 6423199 | 218b | 126N | 241C | | P305 | 281396 | 6417142 | - | - | 19 |
| P63 | 289157 | 6422757 | 218c | 126S | 241A | | P306 | 283234 | 6421511 | - | - | 25 |
| P64 | 289144 | 6423418 | 231 | 145 | 182A | | P307 | 278413 | 6419788 | - | - | 54 |
| P65 | 289343 | 6423367 | 232 | 146 | 182B | | M308 | 278783 | 6426520 | - | - | 56 |
| P66 | 289450 | 6424892 | 233a | 149W | 310 | | P309 | 279340 | 6419169 | - | - | 79 |
| P67 | 289573 | 6424545 | 233b | 149S | 311 | | P310 | 279119 | 6427904 | - | - | 81 |
| P68 | 288582 | 6426073 | 235 | - | 198 | | P311 | 279113 | 6424411 | - | - | 83 |
| P69 | 290918 | 6426190 | 238 | 152 | 195 | | P312 | 276295 | 6427541 | - | - | 109 |
| P70 | 290654 | 6425667 | 239 | 153 | 243 | | P313 | 277467 | 6427987 | - | - | 110 |
| P71 | 290998 | 6426004 | 240 | 154 | 244 | | P314 | 278710 | 6419398 | - | - | 114 |
| P72 | 291304 | 6426070 | 241 | 155 | 295 | | P315 | 282876 | 6419395 | - | - | 121 |
| P73 | 290998 | 6426453 | 242a | 156E | 312 | | P316 | 277117 | 6429575 | - | - | 124 |
| P74 | 290581 | 6426744 | 242b | 156W | 313 | | P317 | 279877 | 6430877 | - | - | 128 |
| P75 | 288720 | 6426954 | 243 | 192 | 314 | | P318 | 277433 | 6427382 | - | - | 130 |
| M76 | 291451 | 6427224 | 250 | M94 | 202 | | P319 | 277249 | 6419831 | - | - | 135 |
| P77 | 291263 | 6428276 | 252 | 166 | 246 | | P320 | 280275 | 6430540 | - | - | 139 |
| P78 | 290335 | 6428124 | 254 | - | 315 | | P321 | 279817 | 6418691 | - | - | 141 |
| P79 | 289023 | 6427912 | 257 | - | 250 | | P322 | 279299 | 6430596 | - | - | 144 |
| P80 | 288371 | 6427916 | 259 | 189 | 251 | | P323 | 279976 | 6418205 | - | - | 147 |
| P81 | 286306 | 6430981 | - | 209S | 126B | | P324 | 286406 | 6430740 | - | - | 126A |
| P82 | 285938 | 6430379 | - | 201 | 321 | | P325 | 290315 | 6422359 | - | - | 237 |
| P83 | 286600 | 6430024 | - | 203 | 174A | | | | | | | |
| P84 | 285853 | 6429984 | - | 200 | 154 | | P327 | 277301 | 6427544 | - | - | 148 |
| P85 | 286604 | 6429824 | - | 199 | 174B | | P328 | 279089 | 6419049 | - | - | 151 |
| P86 | 286615 | 6429565 | - | 198 | 175 | | P329 | 277115 | 6430913 | - | - | 156 |
| M87 | 286572 | 6428577 | - | 195 | 162 | | P330 | 280731 | 6430570 | - | - | 157 |
| P88 | 286988 | 6428524 | - | 194 | 111 | | P331 | 281098 | 6419360 | - | - | 164 |
| P89 | 289045 | 6428273 | - | 184 | 249 | | P332 | 278179 | 6430540 | - | - | 165 |
| P90 | 289011 | 6427682 | - | 186S | 316 | | P333 | 278155 | 6419494 | - | - | 166 |
| P91 | 290632 | 6427338 | - | 161 | 317 | | P334 | 280086 | 6431120 | - | - | 170 |
| P92 | 291438 | 6428661 | - | 169 | 320 | | P335 | 280817 | 6431127 | - | - | 171 |
| P93 | 291256 | 6429607 | - | 171 | 319 | | P336 | 278097 | 6430681 | - | - | 172 |
| P94 | 289458 | 6428835 | - | 180 | 248 | | P337 | 276868 | 6423302 | - | - | 176 |
| P95 | 285558 | 6420556 | - | 97 | 34 | | P338 | 280562 | 6418490 | - | - | 177 |
| P96 | 287987 | 6420086 | - | 90 | 193 | | P339 | 280873 | 6418060 | - | - | 178 |
| P97 | 288037 | 6419039 | - | 88N | 183A | | P340 | 285193 | 6417804 | - | - | 184 |

| Receptor ID | Easting (m) | Northing (m) | Mt Arthur ID | Bengalla ID | Mangoola ID | | Receptor ID | Easting (m) | Northing (m) | Mt Arthur ID | Bengalla ID | Mangoola ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P98 | 288034 | 6418984 | - | 88S | 183B | | P341 | 286725 | 6417716 | - | - | 185 |
| P99 | 287905 | 6419094 | - | 88W | 183C | | P342 | 286681 | 6417667 | - | - | 187 |
| P100 | 286396 | 6419942 | - | 96 | 132A | | P343 | 287161 | 6418219 | - | - | 189 |
| P101 | 299807 | 6427071 | 34 | - | - | | | | | | | |
| P102 | 299972 | 6426709 | 37a | - | - | | P345 | 284850 | 6417293 | - | - | 199 |
| P103 | 291646 | 6421567 | 184a | - | - | | P346 | 283128 | 6418193 | - | - | 200 |
| P104 | 299872 | 6426725 | 37b | - | - | | P347 | 285742 | 6415990 | - | - | 204 |
| P105 | 299629 | 6425993 | 41 | - | - | | P348 | 280780 | 6431467 | - | - | 205 |
| P106 | 299671 | 6425952 | 42 | - | - | | P349 | 279834 | 6431791 | - | - | 206 |
| P107 | 299111 | 6426698 | 27 | - | - | | P350 | 278356 | 6432696 | - | - | 207 |
| P108 | 299669 | 6426114 | 39 | - | - | | P351 | 277116 | 6432526 | - | - | 208 |
| P109 | 299693 | 6426053 | 40 | - | - | | P352 | 276366 | 6424097 | - | - | 209 |
| P110 | 299680 | 6425898 | 43 | - | - | | P353 | 276150 | 6418935 | - | - | 210 |
| P111 | 300708 | 6426373 | 56 | - | - | | P354 | 276652 | 6418703 | - | - | 211 |
| P112 | 300823 | 6426365 | 57 | - | - | | P355 | 276226 | 6418039 | - | - | 212B |
| P113 | 300866 | 6426319 | 58 | - | - | | P356 | 281257 | 6416807 | - | - | 213 |
| P114 | 301020 | 6426283 | 59 | - | - | | P357 | 282234 | 6415555 | - | - | 214 |
| P115 | 301102 | 6426149 | 60 | - | - | | P358 | 282758 | 6416028 | - | - | 215 |
| P116 | 301171 | 6426174 | 61 | - | - | | P359 | 282905 | 6416394 | - | - | 216 |
| P117 | 301288 | 6426127 | 62 | - | - | | P360 | 283033 | 6416628 | - | - | 217 |
| P118 | 304991 | 6425439 | 69 | - | - | | P361 | 284600 | 6416224 | - | - | 218 |
| P119 | 304984 | 6425266 | 70 | - | - | | P362 | 284783 | 6415917 | - | - | 219 |
| P120 | 304996 | 6425080 | 71 | - | - | | P363 | 284437 | 6415739 | - | - | 220 |
| P121 | 305009 | 6424957 | 72 | - | - | | P364 | 285290 | 6415543 | - | - | 222 |
| P122 | 305023 | 6424805 | 73 | - | - | | P365 | 285378 | 6415473 | - | - | 223 |
| P123 | 305073 | 6424570 | 75 | - | - | | P366 | 276150 | 6420454 | - | - | 254A |
| P124 | 305066 | 6424362 | 76 | - | - | | P367 | 279732 | 6418305 | - | - | 253 |
| P125 | 304844 | 6424178 | 77a | - | - | | P368 | 276150 | 6421690 | - | - | 255 |
| P126 | 305067 | 6424239 | 77b | - | - | | P369 | 276150 | 6422476 | - | - | 256 |
| P127 | 304392 | 6424149 | 78 | - | - | | P370 | 278672 | 6431759 | - | - | 258 |
| P128 | 305185 | 6423962 | 79a | - | - | | P371 | 279867 | 6431880 | - | - | 259 |
| P129 | 304925 | 6423902 | 79b | - | - | | P372 | 279918 | 6431925 | - | - | 260 |
| P130 | 305122 | 6423190 | 82 | - | - | | P373 | 280487 | 6432532 | - | - | 261 |
| P131 | 305192 | 6423531 | 83 | - | - | | P374 | 280728 | 6431827 | - | - | 263 |
| P132 | 305235 | 6423088 | 85 | - | - | | P375 | 281281 | 6417791 | - | - | 264 |
| P133 | 305468 | 6422411 | 86 | - | - | | P376 | 276170 | 6420341 | - | - | 265 |
| P134 | 305005 | 6422307 | 87 | - | - | | P377 | 277634 | 6418648 | - | - | 266 |
| P135 | 304813 | 6422657 | 88 | - | - | | P378 | 281579 | 6416584 | - | - | 270 |
| P136 | 304403 | 6422473 | 89 | - | - | | P379 | 281298 | 6417148 | - | - | 283 |
| P137 | 304148 | 6422584 | 90 | - | - | | P380 | 282161 | 6416979 | - | - | 285 |
| P138 | 304161 | 6422132 | 91 | - | - | | P381 | 282085 | 6417021 | - | - | 286 |
| P139 | 304367 | 6422195 | 92 | - | - | | P382 | 281870 | 6417165 | - | - | 287 |
| P140 | 304746 | 6422136 | 93 | - | - | | P383 | 282194 | 6416427 | - | - | 288 |
| P141 | 304872 | 6421947 | 94 | - | - | | P384 | 281575 | 6418057 | - | - | 290 |
| P142 | 305641 | 6422163 | 95 | - | - | | P385 | 281761 | 6416590 | - | - | 291 |
| P143 | 305850 | 6422181 | 96 | - | - | | P386 | 282372 | 6416334 | - | - | 292 |
| P144 | 305812 | 6421905 | 97 | - | - | | P387 | 281506 | 6416784 | - | - | 293 |
| P145 | 305850 | 6421813 | 98 | - | - | | P388 | 284683 | 6416756 | - | - | 294 |
| P146 | 305850 | 6421613 | 99a | - | - | | P389 | 277039 | 6420712 | - | - | 106A |

| Receptor ID | Easting (m) | Northing (m) | Mt Arthur ID | Bengalla ID | Mangoola ID | | Receptor ID | Easting (m) | Northing (m) | Mt Arthur ID | Bengalla ID | Mangoola ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P147 | 305850 | 6421650 | 99b | - | - | | P390 | 277205 | 6420744 | - | - | 106B |
| P148 | 305850 | 6421445 | 100 | - | - | | P391 | 278295 | 6419196 | - | - | 112A |
| P149 | 301894 | 6425612 | IR1 | - | - | | P392 | 278201 | 6419278 | - | - | 112B |
| P150 | 301980 | 6425569 | IR2 | - | - | | P393 | 278126 | 6419254 | - | - | 112C |
| P151 | 302025 | 6425541 | IR3 | - | - | | P394 | 278102 | 6419218 | - | - | 112D |
| P152 | 302112 | 6425463 | IR4 | - | - | | P395 | 286447 | 6420092 | - | - | 132B |
| P153 | 302139 | 6425427 | IR5 | - | - | | P396 | 276963 | 6428659 | - | - | 134A |
| P154 | 302159 | 6425390 | IR6 | - | - | | P397 | 277143 | 6428671 | - | - | 134B |
| P155 | 302175 | 6425354 | IR7 | - | - | | P398 | 277008 | 6428862 | - | - | 134C |
| P156 | 302197 | 6425321 | IR8 | - | - | | P399 | 276808 | 6429869 | - | - | 134D |
| P157 | 302256 | 6425255 | IR9 | - | - | | P400 | 286499 | 6430792 | - | - | 173B |
| P158 | 302167 | 6425234 | IR10 | - | - | | P401 | 287937 | 6417863 | - | - | 201A |
| P159 | 302128 | 6425287 | IR11 | - | - | | P402 | 287901 | 6417808 | - | - | 201B |
| P160 | 302007 | 6425436 | IR12 | - | - | | P403 | 287982 | 6417777 | - | - | 201C |
| P161 | 301960 | 6425468 | IR13 | - | - | | P404 | 277388 | 6419263 | - | - | 21B |
| P162 | 301907 | 6425486 | IR14 | - | - | | P405 | 281385 | 6416662 | - | - | 284A |
| P163 | 302340 | 6425216 | IR15 | - | - | | P406 | 281358 | 6416605 | - | - | 284B |
| P164 | 302427 | 6425179 | IR16 | - | - | | P407 | 287895 | 6427951 | - | - | 96B |
| P165 | 302461 | 6425164 | IR17 | - | - | | P408 | 287944 | 6427953 | - | - | 168 |
| P166 | 302544 | 6425132 | IR18 | - | - | | P409 | 287636 | 6421811 | - | - | 125D |
| P167 | 302514 | 6425062 | IR19 | - | - | | P410 | 287613 | 6421749 | - | - | 125E |
| P168 | 302438 | 6425089 | IR20 | - | - | | P411 | 287616 | 6421777 | - | - | 125F |
| P169 | 302395 | 6425105 | IR21 | - | - | | P412 | 285821 | 6429873 | - | - | 309 |
| P170 | 302357 | 6425122 | IR22 | - | - | | | | | | | |
| P171 | 302313 | 6425140 | IR23 | - | - | | M414 | 279546 | 6426016 | - | - | 2 |
| P172 | 302242 | 6425172 | IR24 | - | - | | M415 | 285648 | 6425069 | - | - | 9 |
| P173 | 305850 | 6421257 | 101 | - | - | | M416 | 285297 | 6428071 | - | - | 10 |
| P174 | 305850 | 6421123 | 102 | - | - | | M417 | 283999 | 6427519 | - | - | 11 |
| P175 | 291305 | 6420460 | 184c | - | - | | M418 | 285658 | 6426386 | - | - | 16 |
| P176 | 300311 | 6429843 | - | 2 | - | | M419 | 284402 | 6428953 | - | - | 26 |
| P177 | 300346 | 6429733 | - | 3 | - | | M420 | 278278 | 6425567 | - | - | 28 |
| P178 | 300961 | 6429300 | - | 7 | - | | M421 | 283095 | 6419751 | - | - | 30 |
| P179 | 301012 | 6429172 | - | 8 | - | | M422 | 283660 | 6427765 | - | - | 31 |
| P180 | 300798 | 6429363 | - | 12 | - | | M423 | 283225 | 6419675 | - | - | 37 |
| P181 | 300332 | 6429496 | - | 17 | - | | M424 | 286336 | 6424840 | - | - | 38 |
| P182 | 300179 | 6429392 | - | 19 | - | | M425 | 280627 | 6430249 | - | - | 39 |
| P183 | 300007 | 6429274 | - | 22 | - | | M426 | 285030 | 6429013 | - | - | 40 |
| P184 | 299924 | 6429210 | - | 23 | - | | M427 | 279891 | 6427721 | - | - | 44 |
| P185 | 299904 | 6429199 | - | 24 | - | | M428 | 287202 | 6425411 | - | - | 48 |
| P186 | 299961 | 6429057 | - | 25 | - | | M429 | 280266 | 6427679 | - | - | 49 |
| P187 | 299515 | 6428671 | - | 27W | - | | M430 | 278621 | 6426269 | - | - | 51 |
| P188 | 300461 | 6427519 | - | 30 | - | | M431 | 285130 | 6428546 | - | - | 55 |
| P189 | 300359 | 6427450 | - | 31 | - | | M432 | 277992 | 6423722 | - | - | 57 |
| P190 | 300271 | 6427418 | - | 33 | - | | M433 | 280024 | 6427668 | - | - | 60 |
| P191 | 299691 | 6426930 | - | 39 | - | | M434 | 284054 | 6428091 | - | - | 64 |
| P192 | 299205 | 6426702 | - | 54 | - | | M435 | 286388 | 6424380 | - | - | 69 |
| P193 | 299874 | 6426090 | - | 81 | - | | M436 | 283129 | 6430097 | - | - | 71 |
| P194 | 299769 | 6426047 | - | 83 | - | | M437 | 278506 | 6426667 | - | - | 72 |
| P195 | 299902 | 6425975 | - | 84 | - | | M438 | 285769 | 6425960 | - | - | 77 |

| Receptor ID | Easting (m) | Northing (m) | Mt Arthur ID | Bengalla ID | Mangoola ID | | Receptor ID | Easting (m) | Northing (m) | Mt Arthur ID | Bengalla ID | Mangoola ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P196 | 299432 | 6426142 | - | 63 | - | | M439 | 279548 | 6427841 | - | - | 80 |
| M197 | 298720 | 6426868 | - | M37 | - | | M440 | 280042 | 6426766 | - | - | 82 |
| M198 | 290776 | 6424455 | - | M92 | - | | M441 | 282083 | 6427536 | - | - | 84 |
| P199 | 290810 | 6421676 | - | 110S | - | | M442 | 284403 | 6428113 | - | - | 85 |
| P200 | 299778 | 6425939 | - | 85 | - | | M443 | 282401 | 6428521 | - | - | 88 |
| P201 | 290465 | 6421416 | - | 108 | - | | M444 | 281250 | 6428153 | - | - | 90 |
| P202 | 291262 | 6423026 | - | 112N | - | | M445 | 278857 | 6427661 | - | - | 91 |
| | | | | | | | M446 | 279738 | 6427713 | - | - | 92 |
| P204 | 291223 | 6426368 | - | 156S | - | | M447 | 279335 | 6429019 | - | - | 95 |
| M205 | 291454 | 6427227 | - | 158 | - | | M448 | 281309 | 6429283 | - | - | 101 |
| P206 | 289014 | 6428004 | - | 186N | - | | M449 | 276992 | 6422355 | - | - | 103 |
| P207 | 286248 | 6431266 | - | 209E | - | | M450 | 286769 | 6422248 | - | - | 105 |
| P208 | 285918 | 6431702 | - | 209W | - | | M451 | 277368 | 6426200 | - | - | 108 |
| P209 | 286103 | 6432158 | - | 209N | - | | M452 | 286016 | 6419698 | - | - | 115 |
| P210 | 289229 | 6433814 | - | 222 | - | | M453 | 285767 | 6428825 | - | - | 118 |
| P211 | 290586 | 6433646 | - | 230 | - | | M454 | 285800 | 6418802 | - | - | 133 |
| P212 | 295826 | 6435256 | - | 252 | - | | M455 | 286887 | 6420607 | - | - | 137 |
| P213 | 289245 | 6435354 | - | 286 | - | | M456 | 277865 | 6426606 | - | - | 138 |
| P214 | 288825 | 6435299 | - | 287 | - | | M457 | 283594 | 6419107 | - | - | 140 |
| P215 | 288995 | 6434553 | - | 288 | - | | M458 | 285465 | 6428871 | - | - | 167 |
| P216 | 299937 | 6432297 | - | 289N | - | | M459 | 286723 | 6420297 | - | - | 169 |
| P217 | 299972 | 6432128 | - | 289S | - | | M460 | 283330 | 6418558 | - | - | 179 |
| P218 | 299491 | 6432783 | - | 292W | - | | M461 | 278107 | 6427788 | - | - | 180 |
| P219 | 299599 | 6432846 | - | 292E | - | | M462 | 280831 | 6432103 | - | - | 262 |
| M220 | 291543 | 6430721 | - | M1 | - | | M463 | 282909 | 6418776 | - | - | 269 |
| M221 | 293369 | 6429342 | - | M2 | - | | M464 | 283206 | 6431893 | - | - | 289 |
| M222 | 294851 | 6429525 | - | M3 | - | | M465 | 285106 | 6422323 | - | - | 15B |
| M223 | 295911 | 6429780 | - | M4 | - | | M466 | 282851 | 6418449 | - | - | 269A |
| M224 | 295934 | 6429498 | - | M5 | - | | M467 | 282782 | 6418336 | - | - | 269B |
| M225 | 296402 | 6428900 | - | M6 | - | | M468 | 279943 | 6428349 | - | - | 33A |
| M226 | 297119 | 6428729 | - | M7 | - | | M469 | 280366 | 6428043 | - | - | 33B |
| M227 | 298081 | 6432549 | - | M8 | - | | M470 | 281518 | 6427724 | - | - | 33C |
| M228 | 298467 | 6432163 | - | M9 | - | | M471 | 280812 | 6426923 | - | - | 33E |
| M229 | 298804 | 6429893 | - | M10 | - | | M472 | 285431 | 6419882 | - | - | 33F |
| M230 | 299634 | 6429983 | - | M11 | - | | M473 | 284430 | 6426283 | - | - | 33G |
| M231 | 297550 | 6428684 | - | M12 | - | | M474 | 280330 | 6423441 | - | - | 33H |
| M232 | 298477 | 6429217 | - | M13 | - | | M475 | 278585 | 6427759 | - | - | 33I |
| M233 | 298375 | 6429112 | - | M14 | - | | M476 | 278732 | 6426235 | - | - | 33K |
| M234 | 298605 | 6428778 | - | M15 | - | | M477 | 283874 | 6419261 | - | - | 33M |
| M235 | 298770 | 6428487 | - | M16 | - | | M478 | 278537 | 6427374 | - | - | 45A |
| M236 | 299168 | 6427664 | - | M17 | - | | M479 | 277628 | 6426937 | - | - | 45B |
| M237 | 299011 | 6427485 | - | M18 | - | | M480 | 278355 | 6424370 | - | - | 59B |
| M238 | 291454 | 6427227 | - | M94 | - | | M481 | 285867 | 6428993 | - | - | 75A |
| M239 | 297294 | 6428736 | - | M19 | - | | M482 | 278315 | 6427707 | - | - | 87A |
| M240 | 297466 | 6428685 | - | M20 | - | | M483 | 277941 | 6427783 | - | - | 87B |
| M241 | 297644 | 6428772 | - | M21 | - | | M484 | 287583 | 6427890 | - | - | 96A |
| M242 | 297817 | 6428725 | - | M22 | - | | P485 | 283176 | 6431023 | - | - | 66 |
| M243 | 298103 | 6428736 | - | M23 | - | | - | - | - | - | - | - |

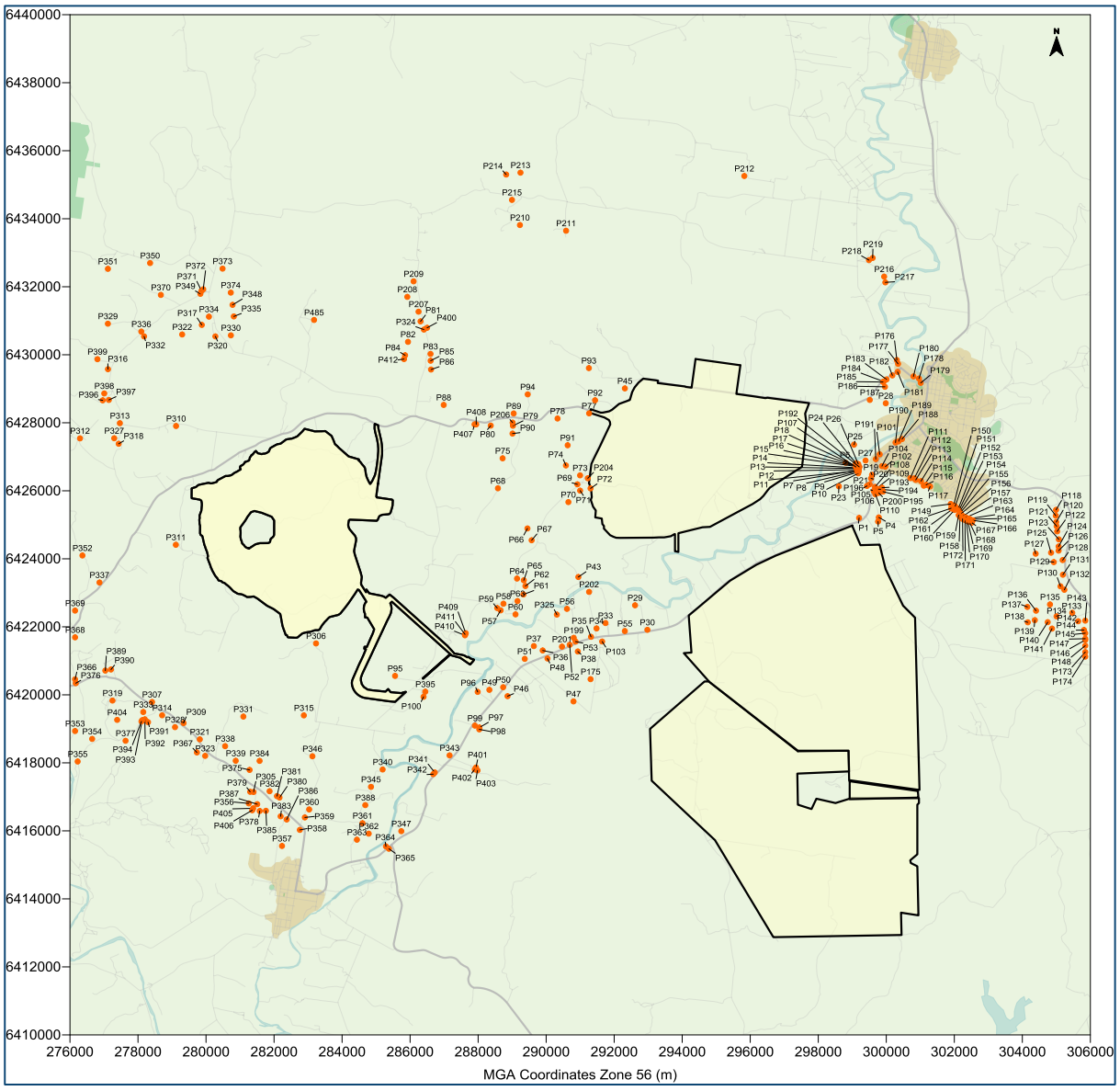


**Figure A-1: Sensitive receptor locations – Privately-owned**

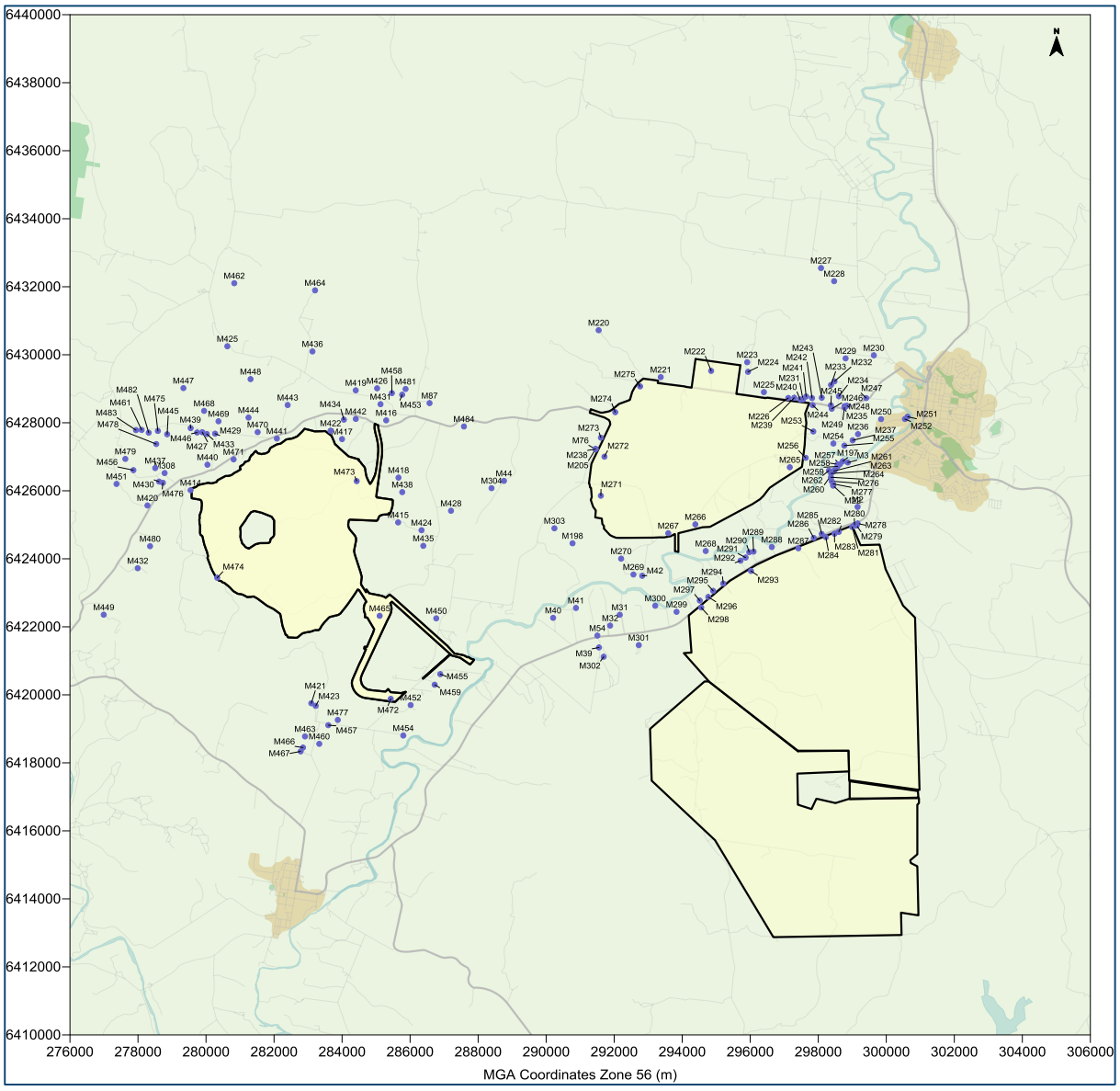


**Figure A-2: Sensitive receptor locations – Mine-owned**

# Appendix B

## *Isopleth Diagrams*

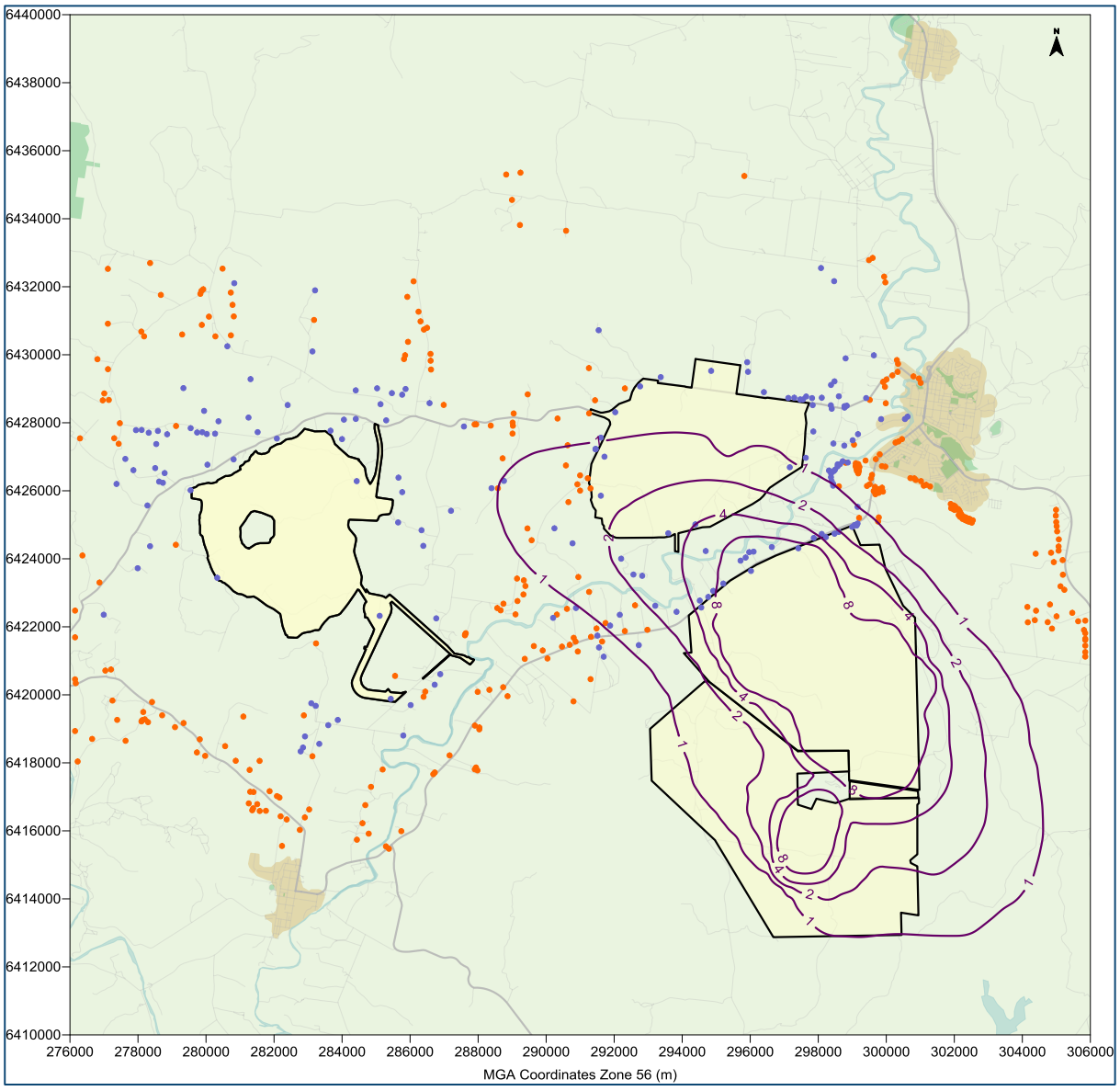


**Figure B-1: Predicted annual average $PM_{2.5}$ concentrations due to emissions from Mt Arthur in Scenario 1 (µg/m³)**

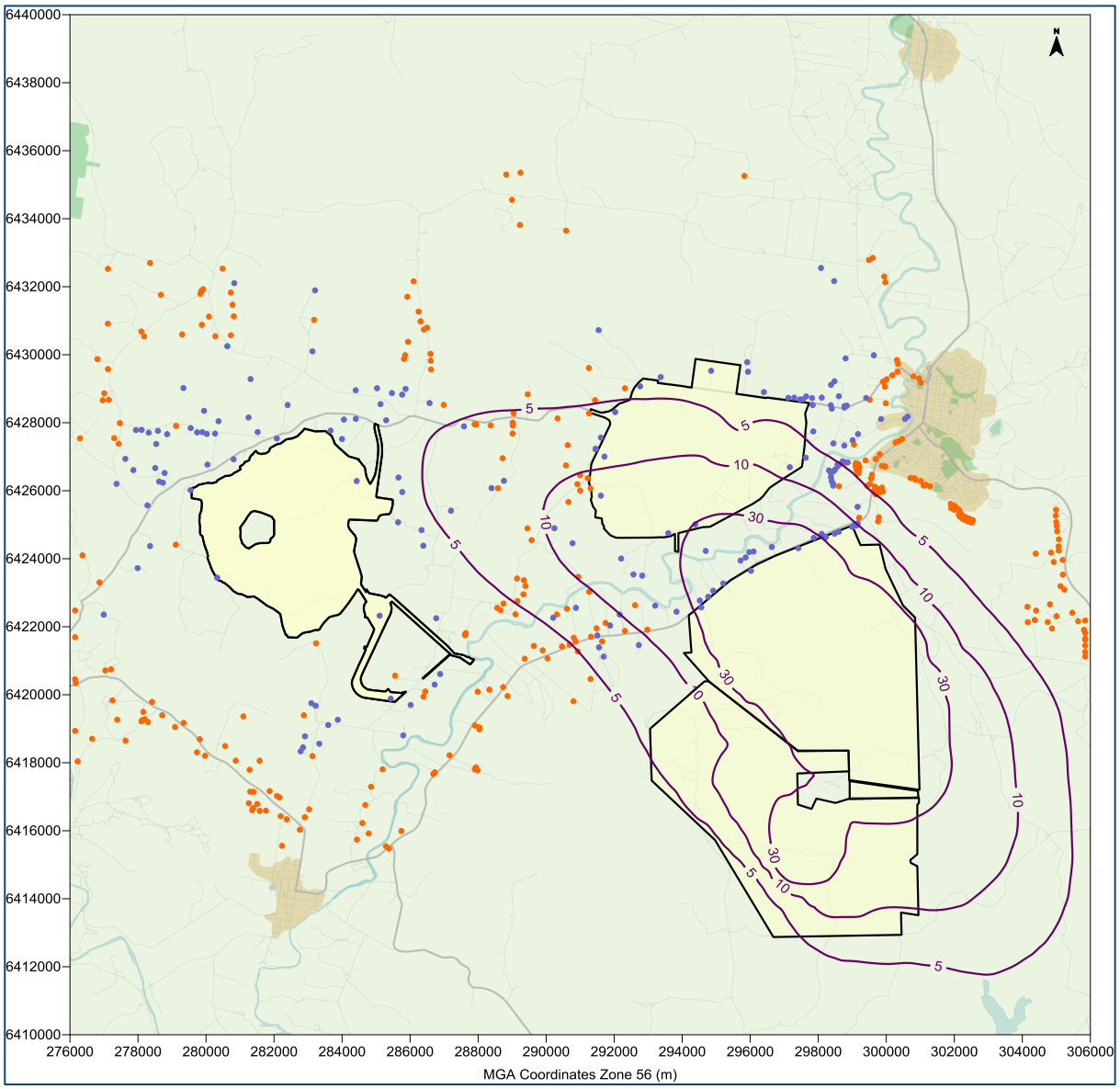


**Figure B-2: Predicted annual average $PM_{10}$ concentrations due to emissions from Mt Arthur in Scenario 1 (µg/m³)**

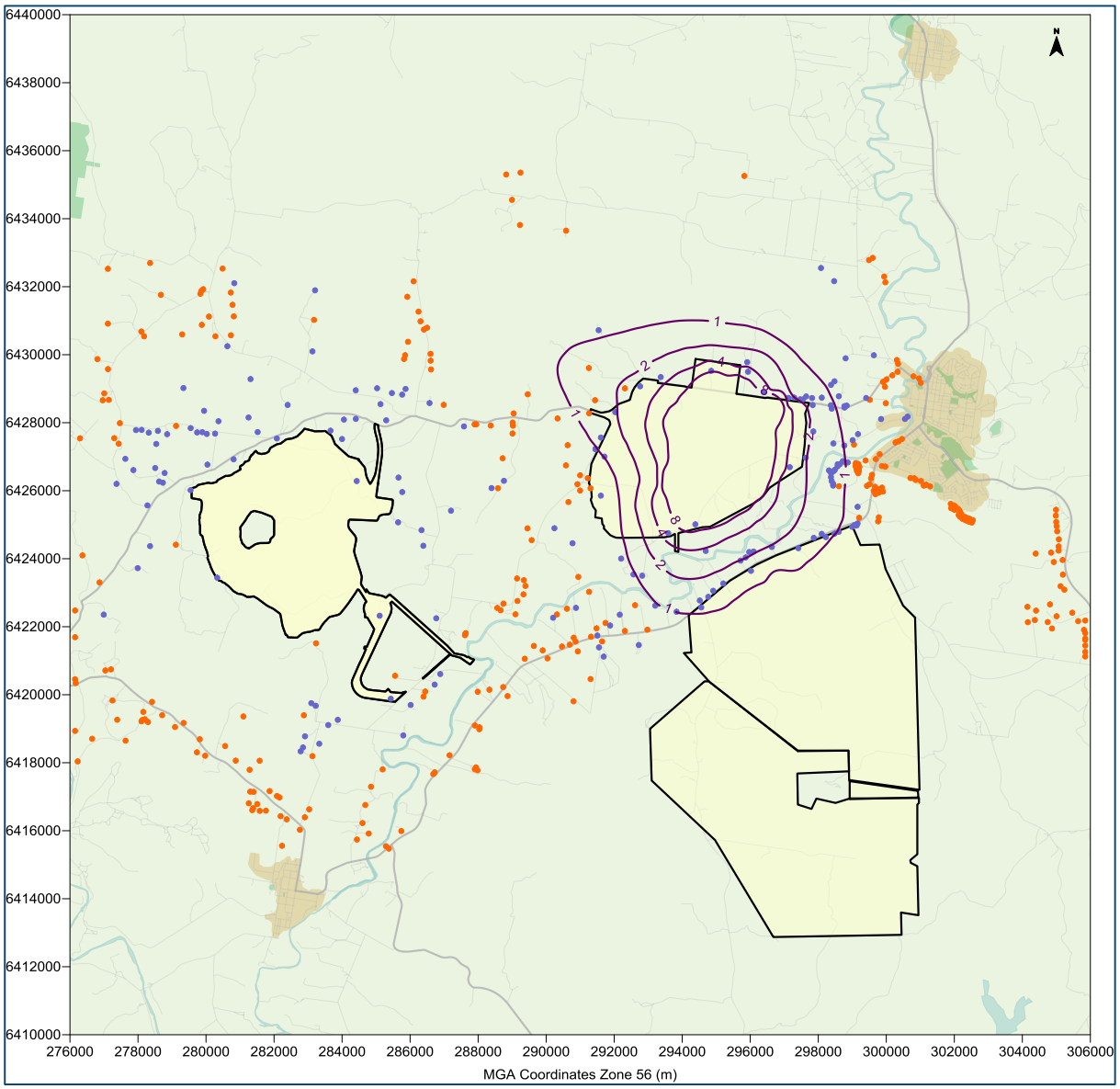


**Figure B-3: Predicted annual average $PM_{2.5}$ concentrations due to emissions from Bengalla in Scenario 1 (µg/m³)**

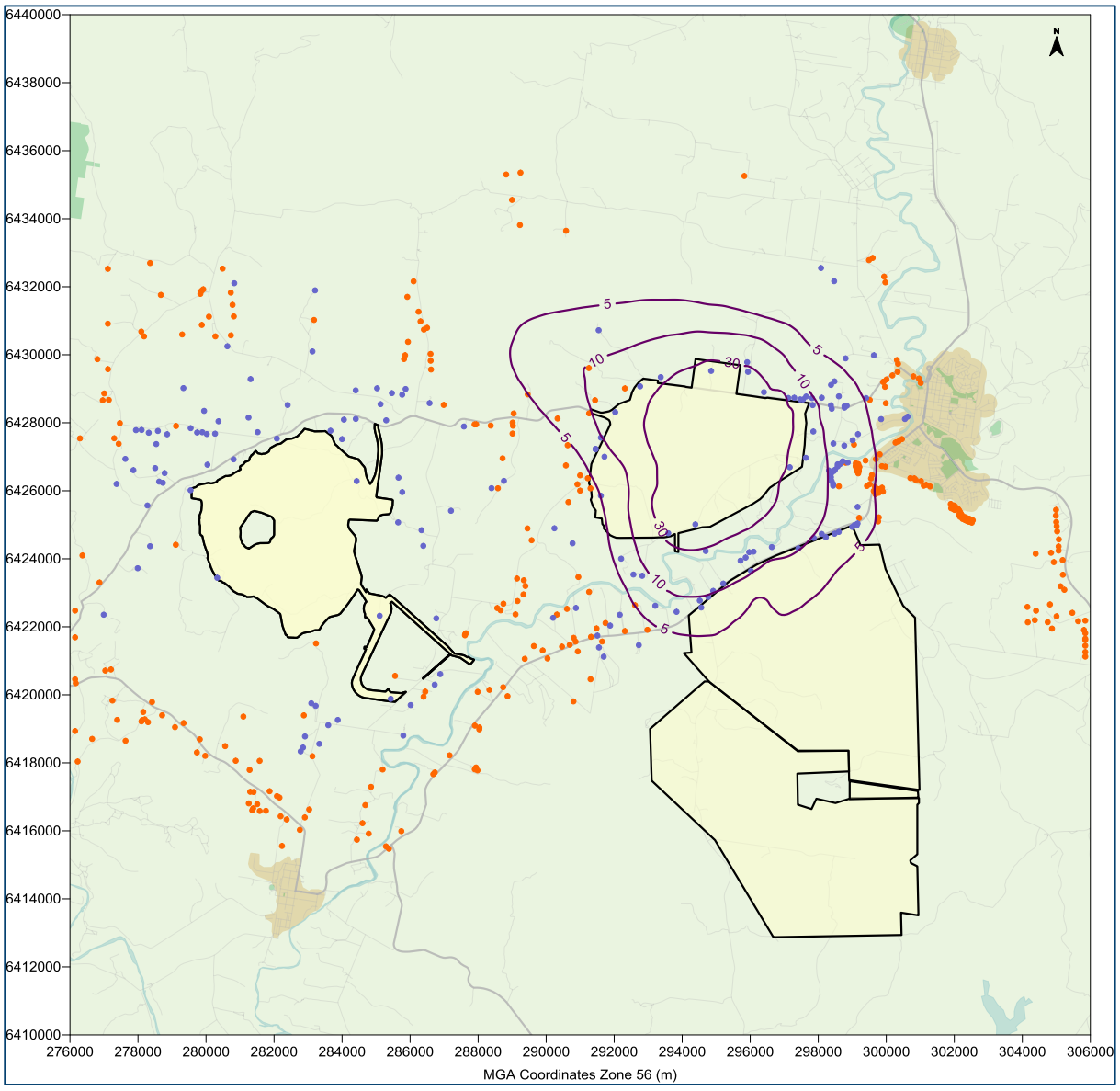


**Figure B-4: Predicted annual average $PM_{10}$ concentrations due to emissions from Bengalla in Scenario 1 (µg/m³)**

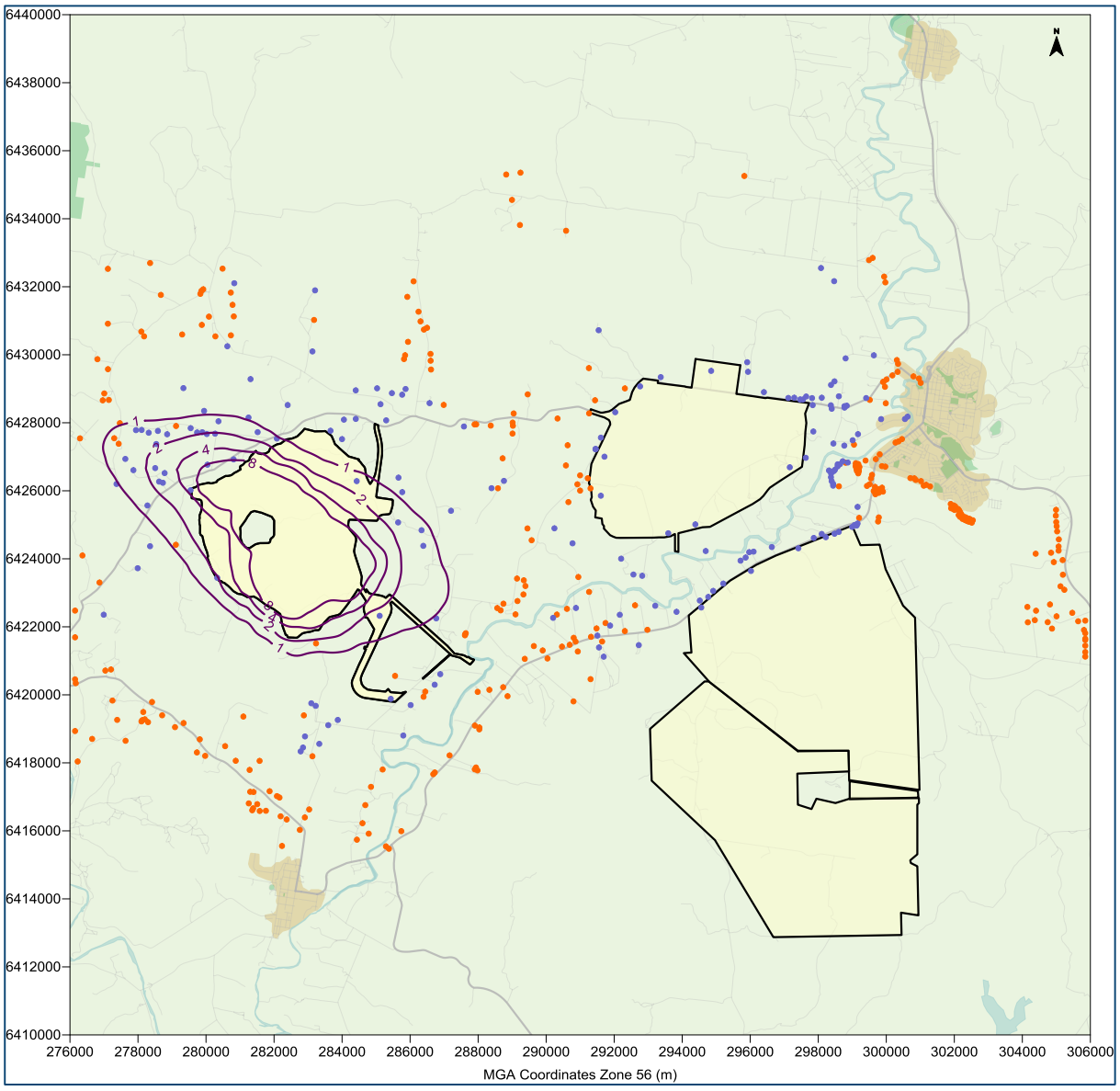


**Figure B-5: Predicted annual average $PM_{2.5}$ concentrations due to emissions from Mangoola in Scenario 1 (µg/m³)**

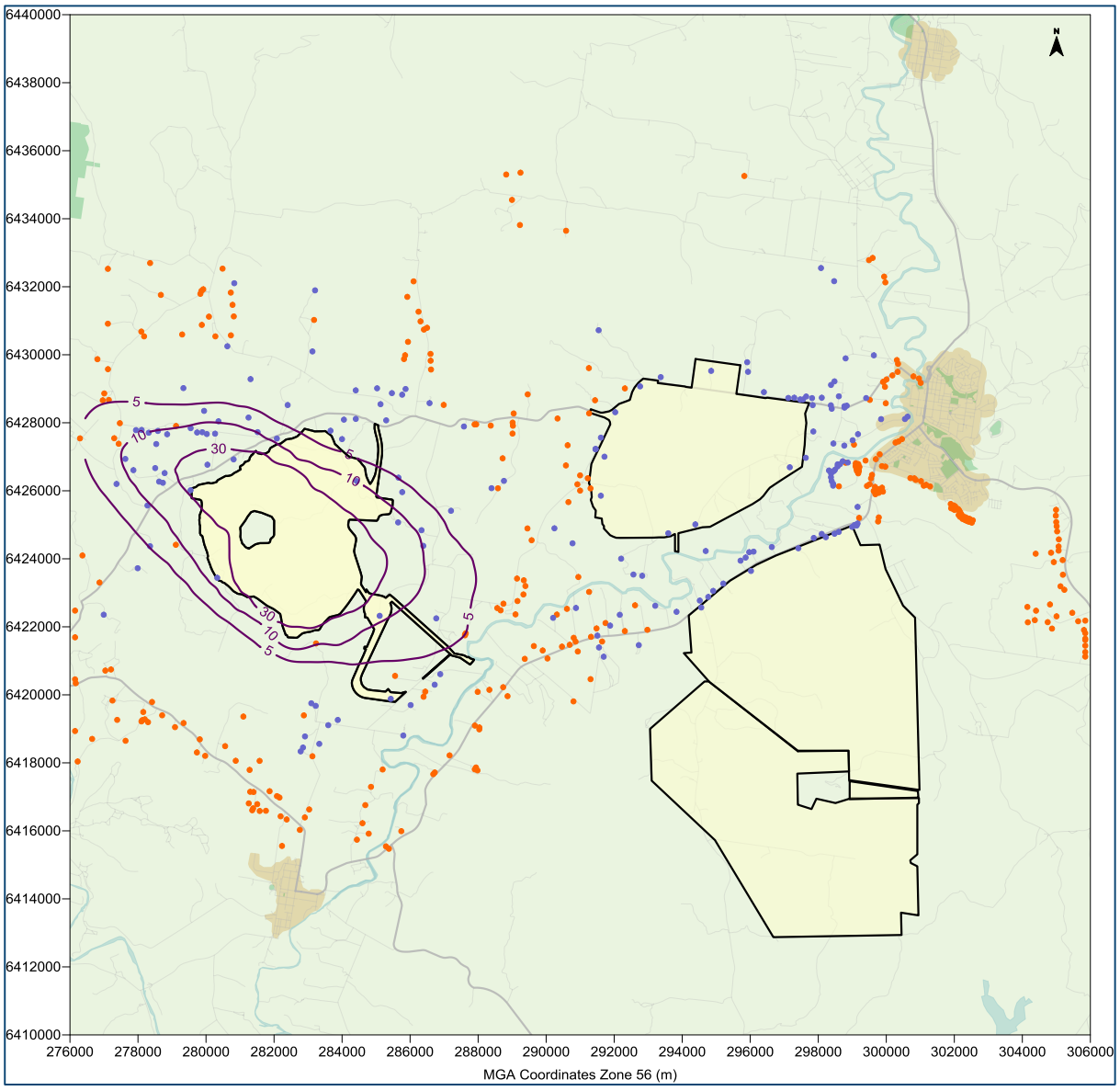


**Figure B-6: Predicted annual average $PM_{10}$ concentrations due to emissions from Mangoola in Scenario 1 (µg/m³)**

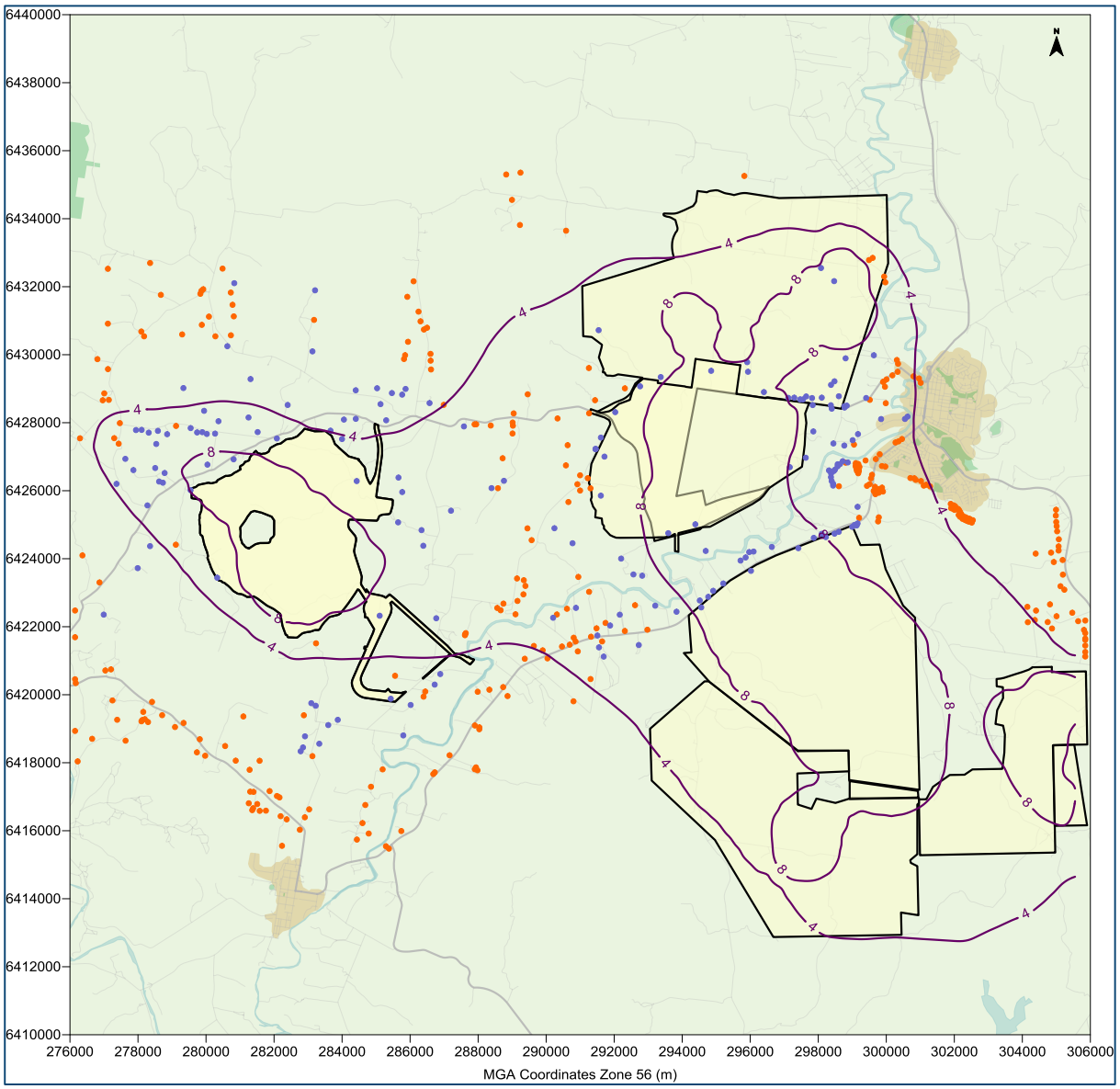


**Figure B-7: Predicted cumulative annual average $PM_{2.5}$ concentrations due to emissions from all sources in Scenario 1 (µg/m³)**

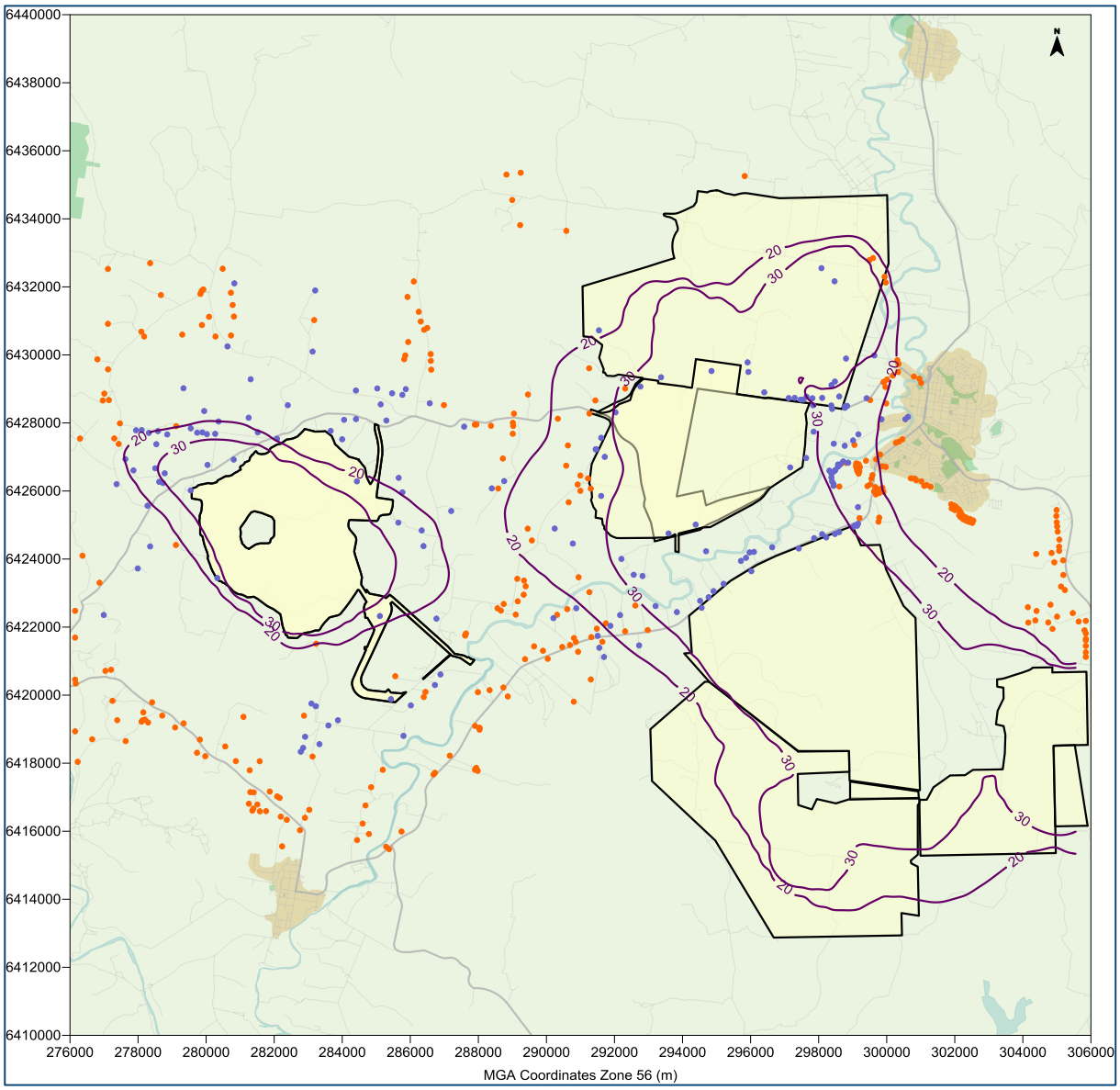


**Figure B-8: Predicted cumulative annual average $PM_{10}$ concentrations due to emissions from all sources in Scenario 1 (µg/m³)**

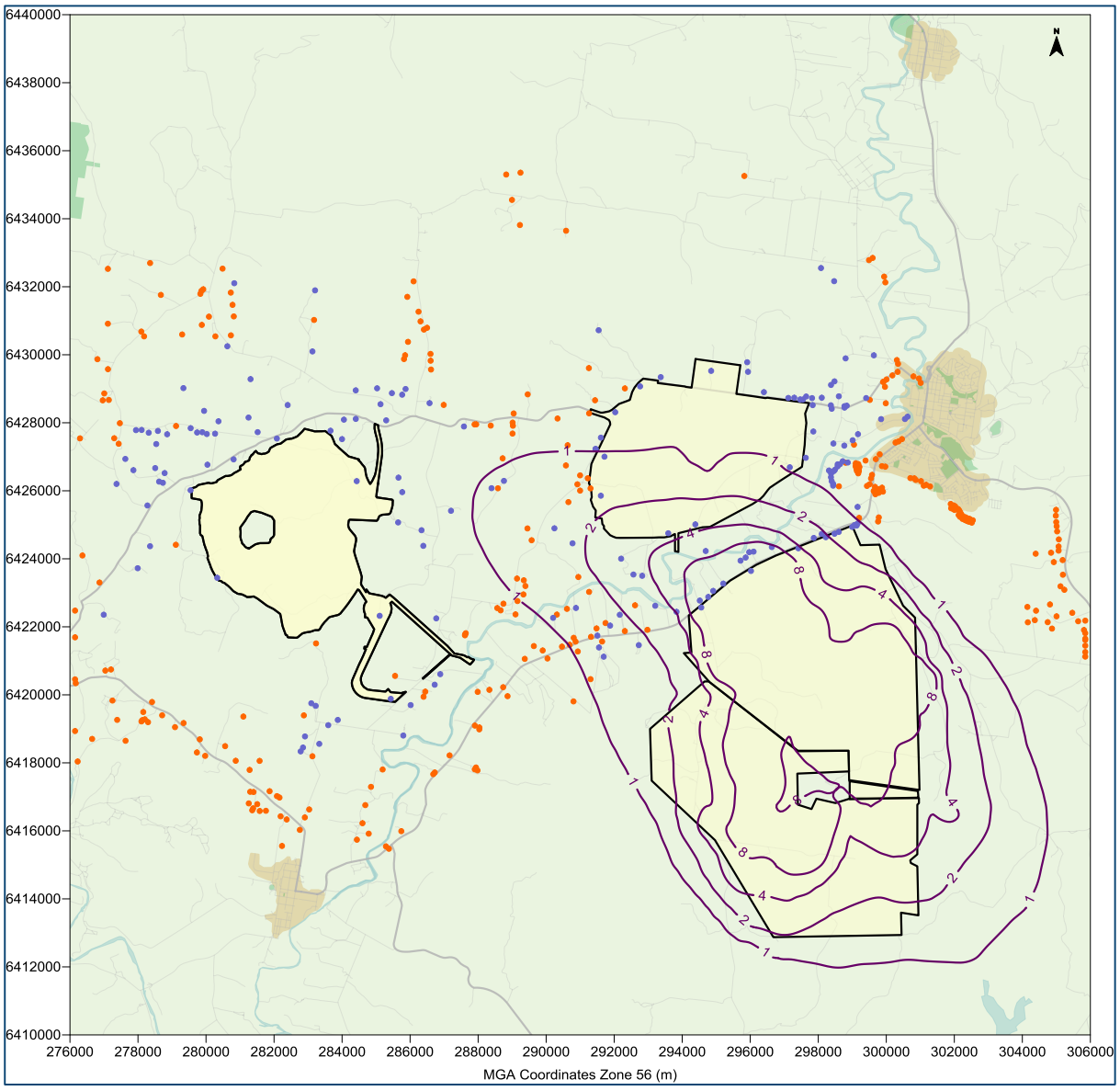


**Figure B-9: Predicted annual average $PM_{2.5}$ concentrations due to emissions from Mt Arthur in Scenario 2 (µg/m³)**

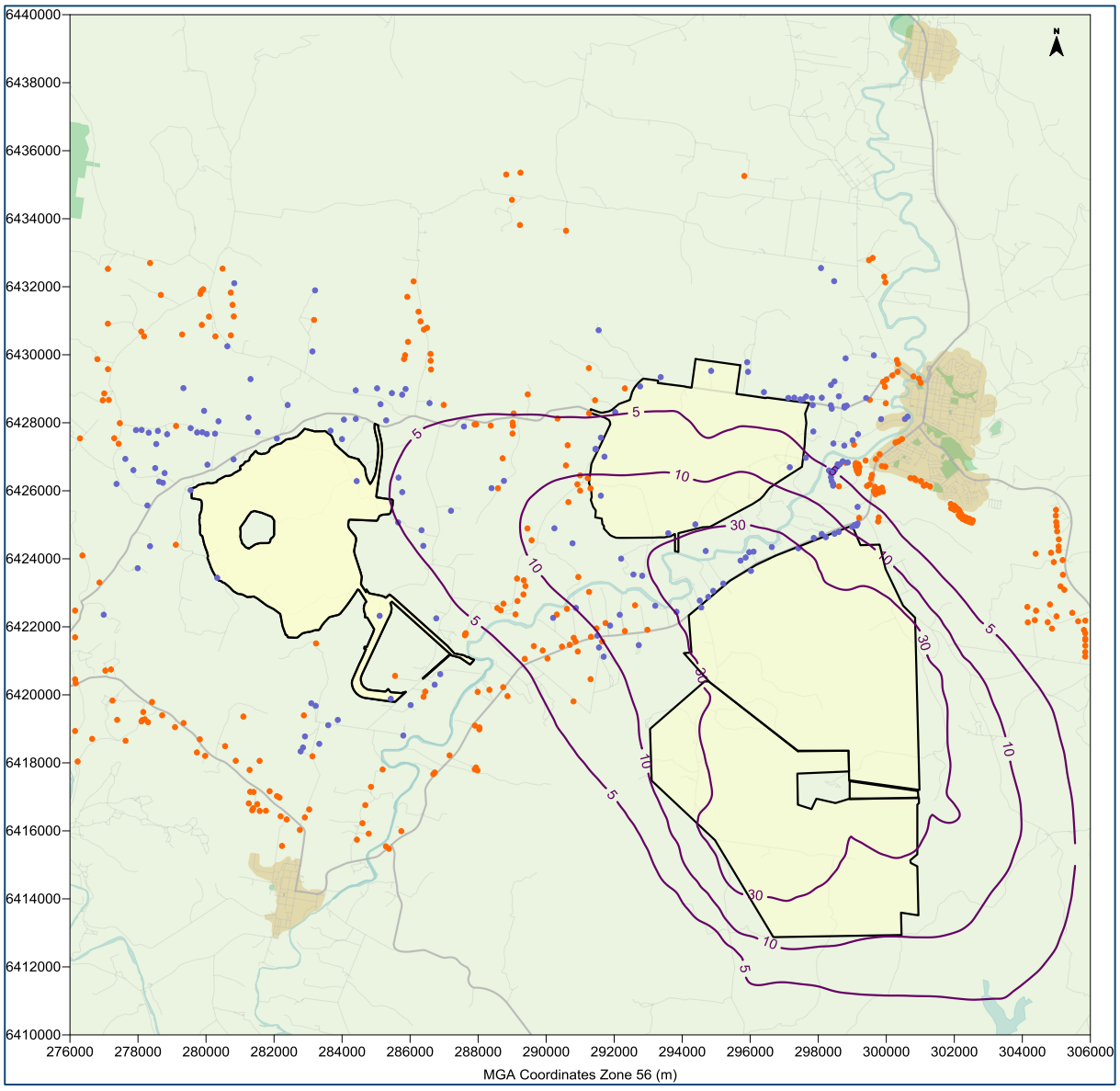


**Figure B-10: Predicted annual average $PM_{10}$ concentrations due to emissions from Mt Arthur in Scenario 2 (µg/m³)**

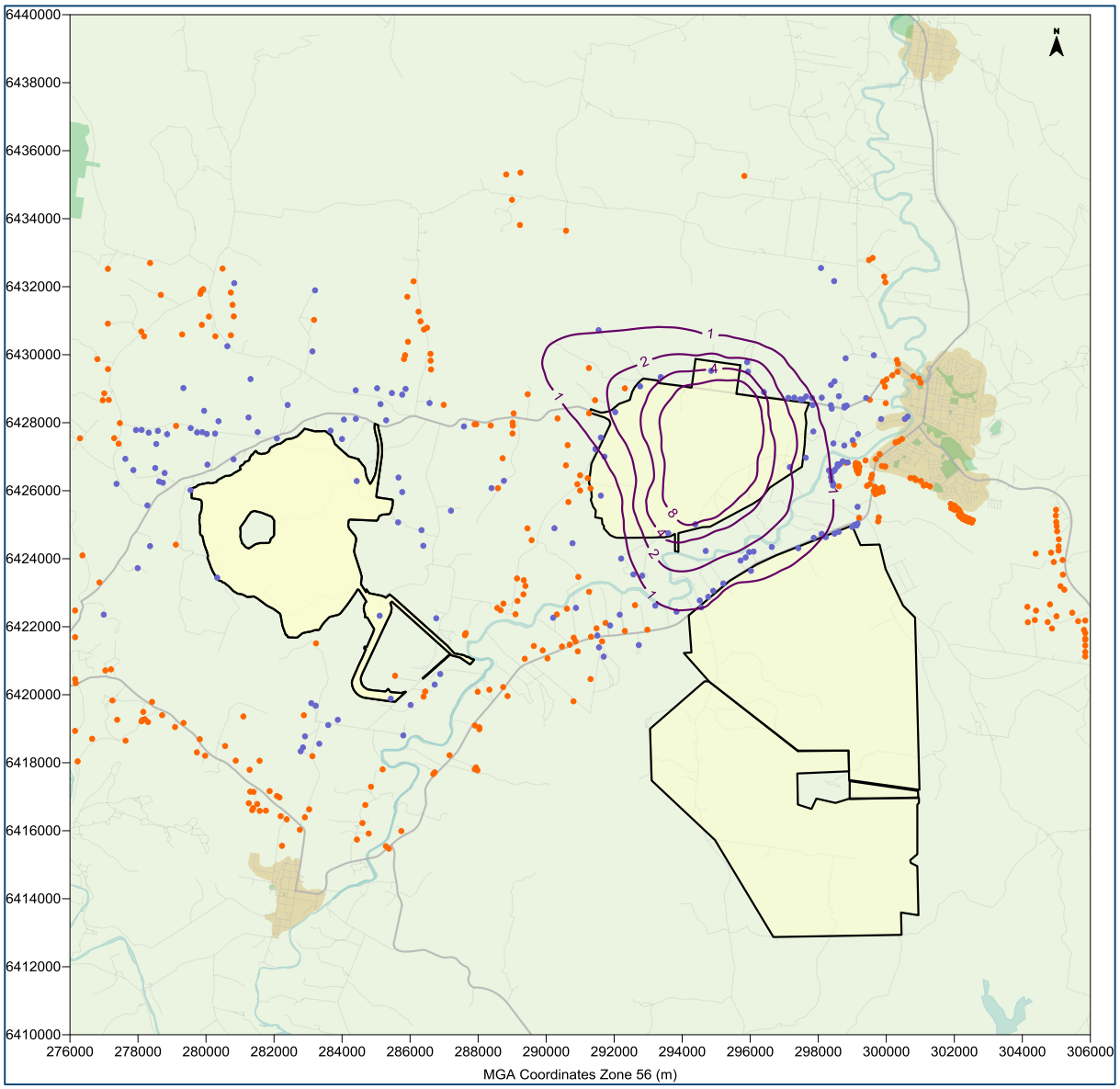


**Figure B-11: Predicted annual average $PM_{2.5}$ concentrations due to emissions from Bengalla in Scenario 2 (µg/m³)**

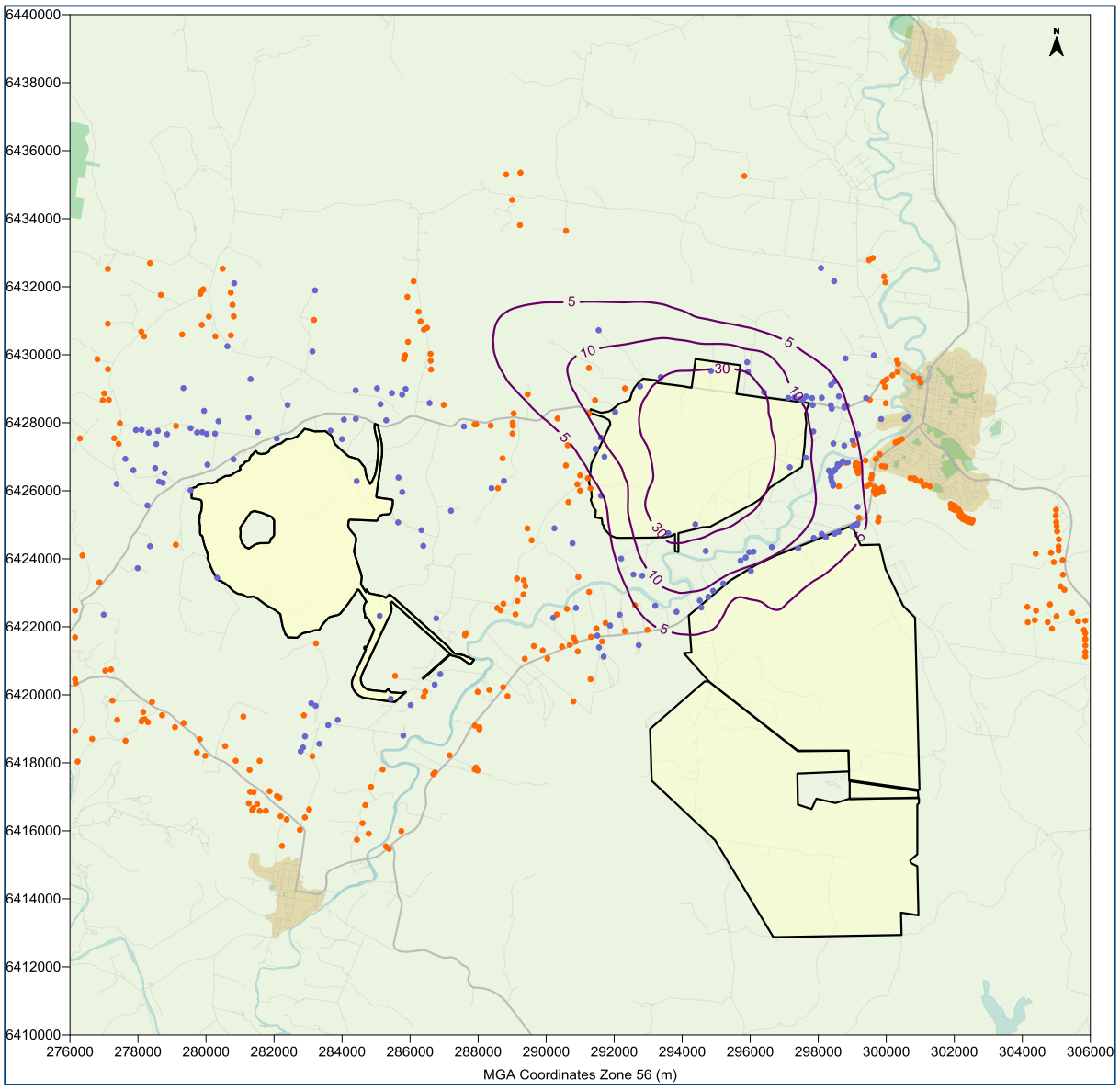


**Figure B-12: Predicted annual average $PM_{10}$ concentrations due to emissions from Bengalla in Scenario 2 (µg/m³)**

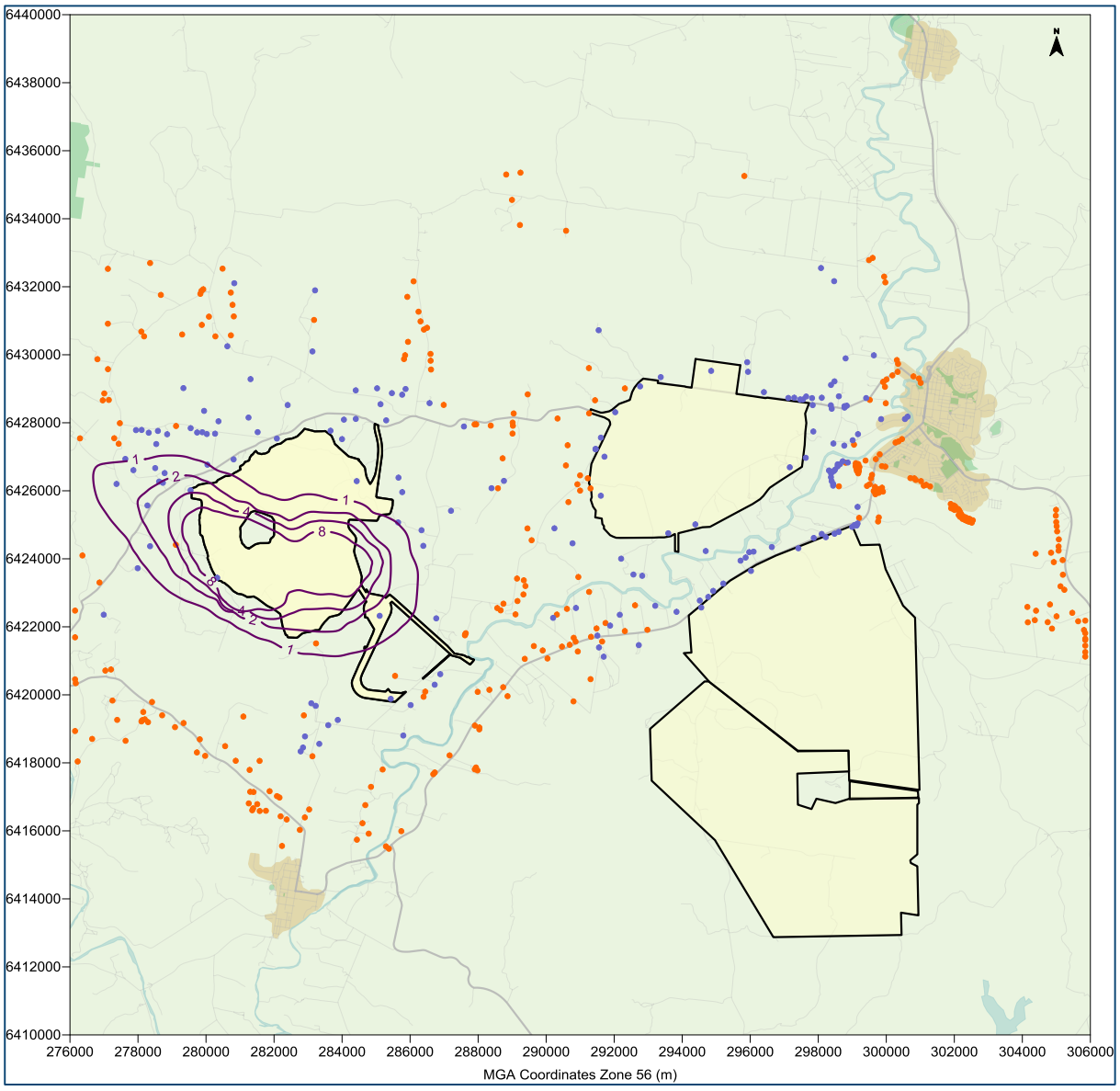


**Figure B-13: Predicted annual average $PM_{2.5}$ concentrations due to emissions from Mangoola in Scenario 2 (µg/m³)**

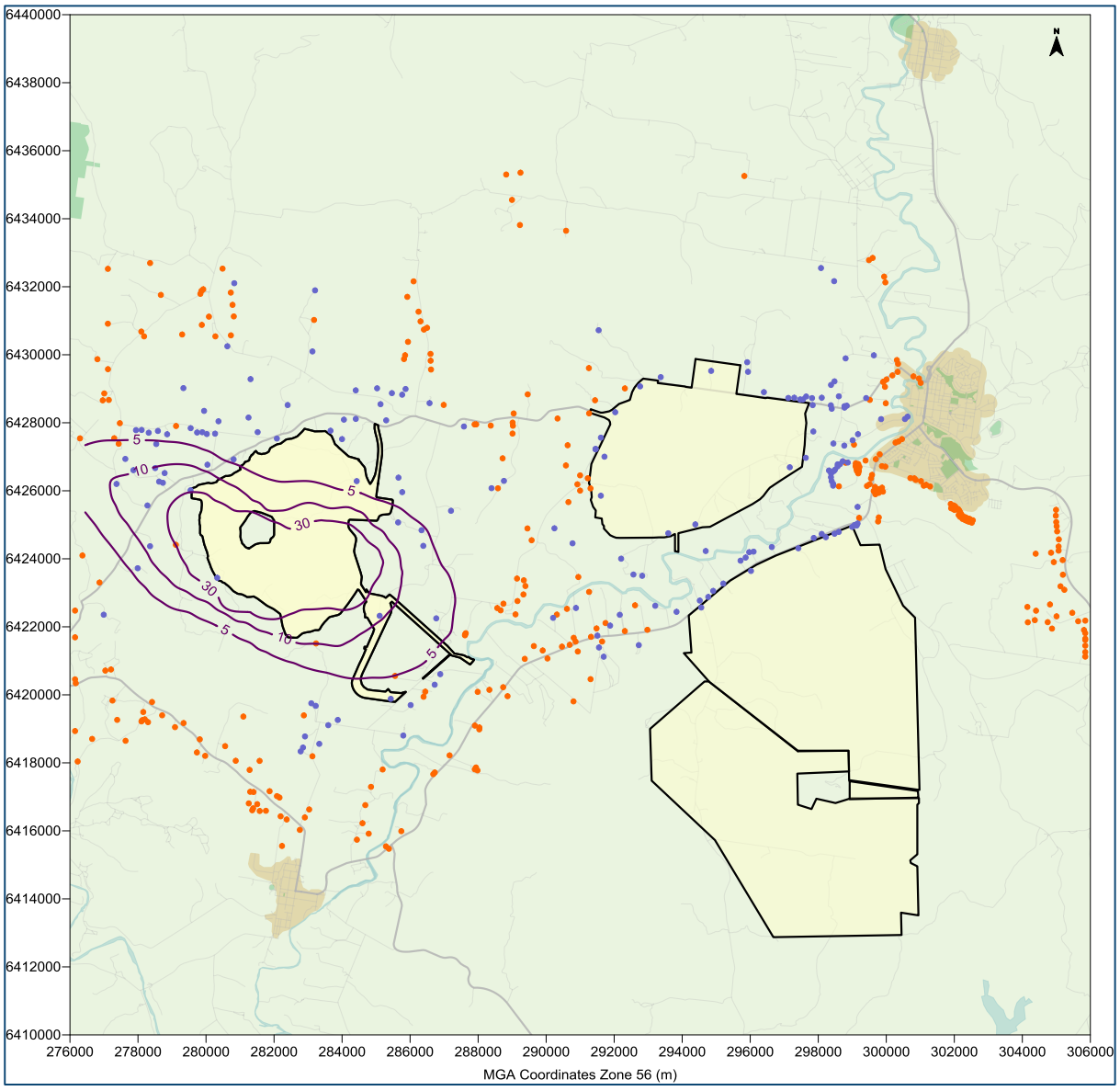


**Figure B-14: Predicted annual average $PM_{10}$ concentrations due to emissions from Mangoola in Scenario 2 (µg/m³)**

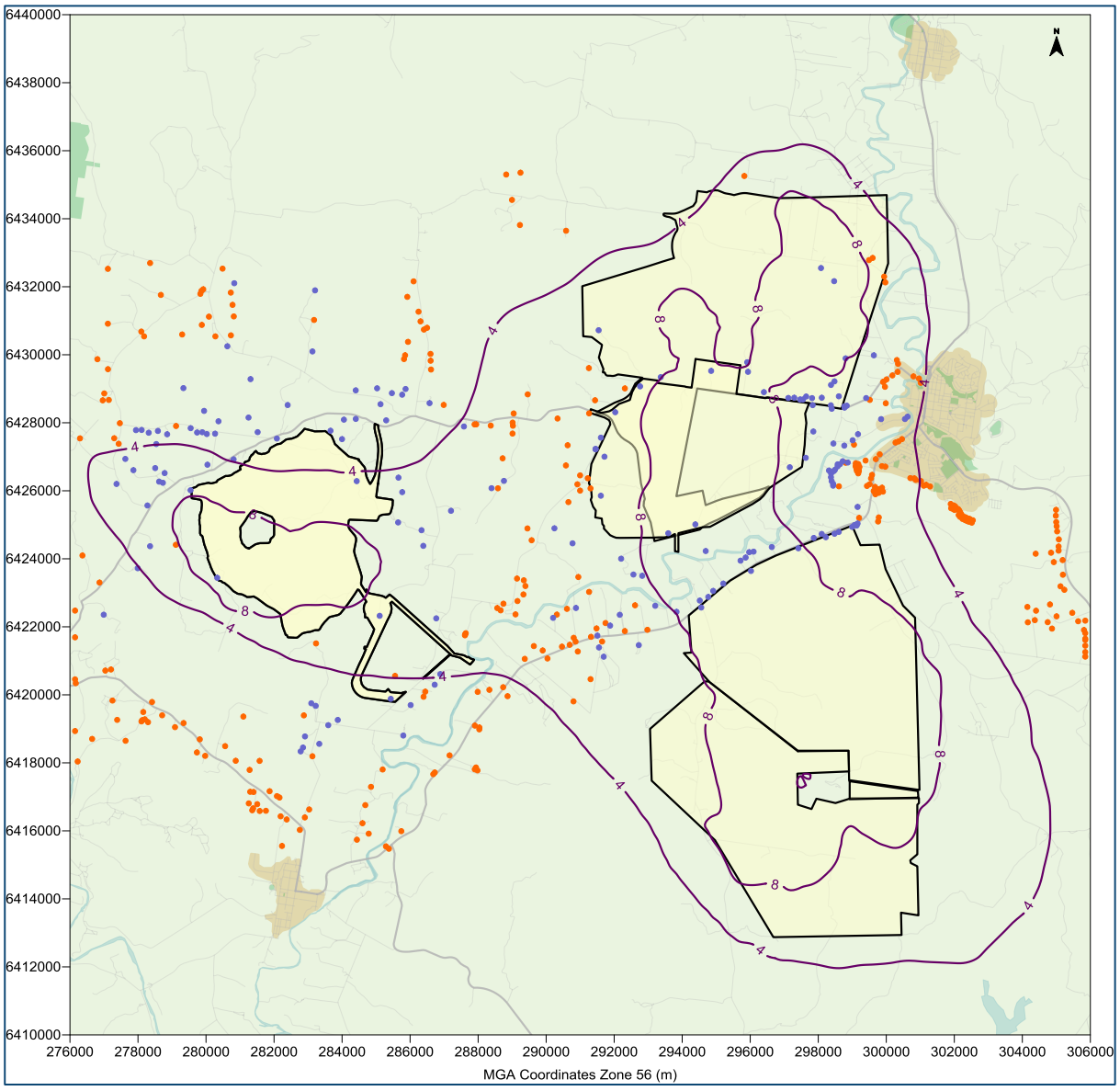


**Figure B-15: Predicted cumulative annual average $PM_{2.5}$ concentrations due to emissions from all sources in Scenario 2 (µg/m³)**

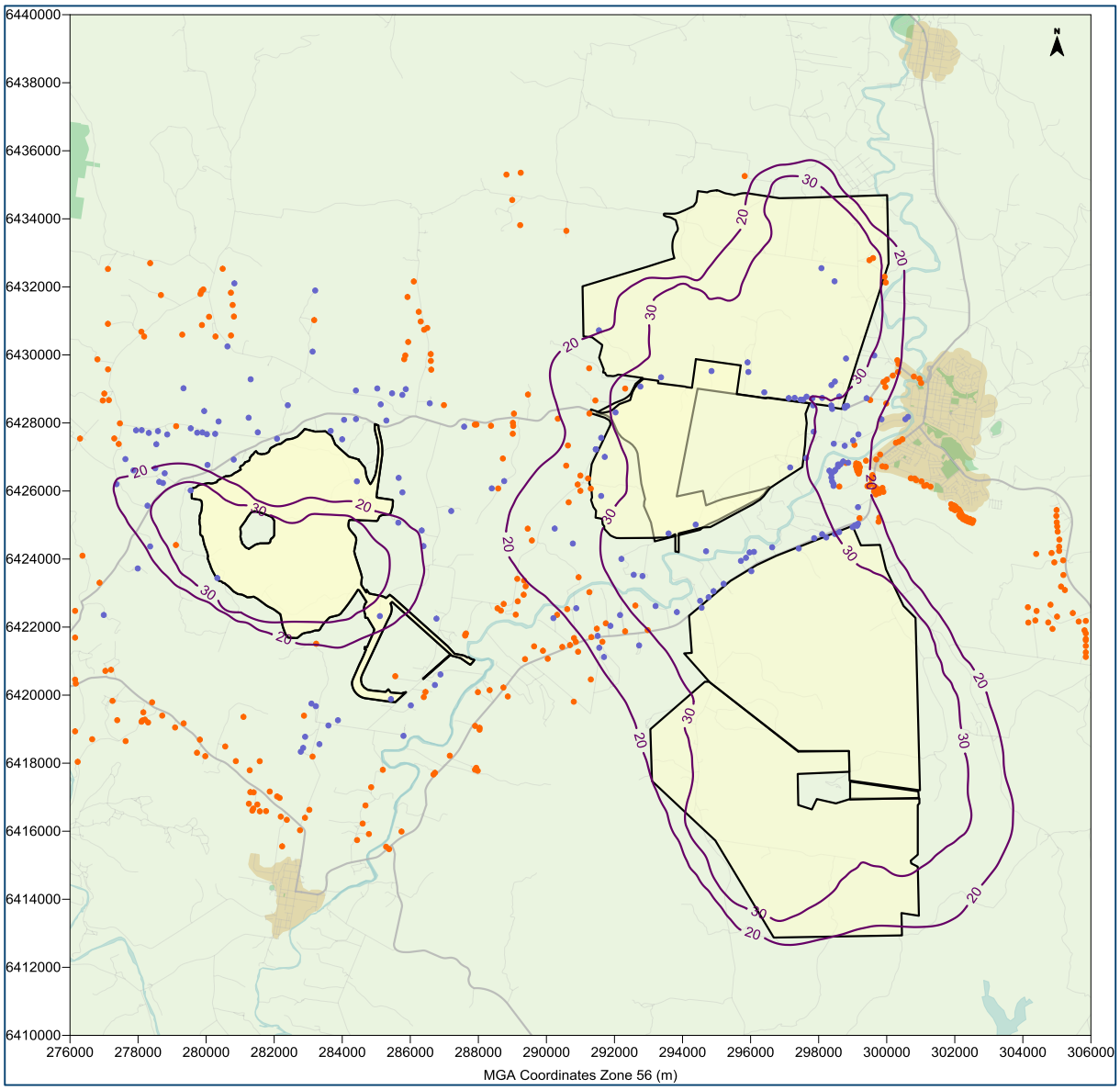


**Figure B-16: Predicted cumulative annual average $PM_{10}$ concentrations due to emissions from all sources in Scenario 2 (µg/m³)**

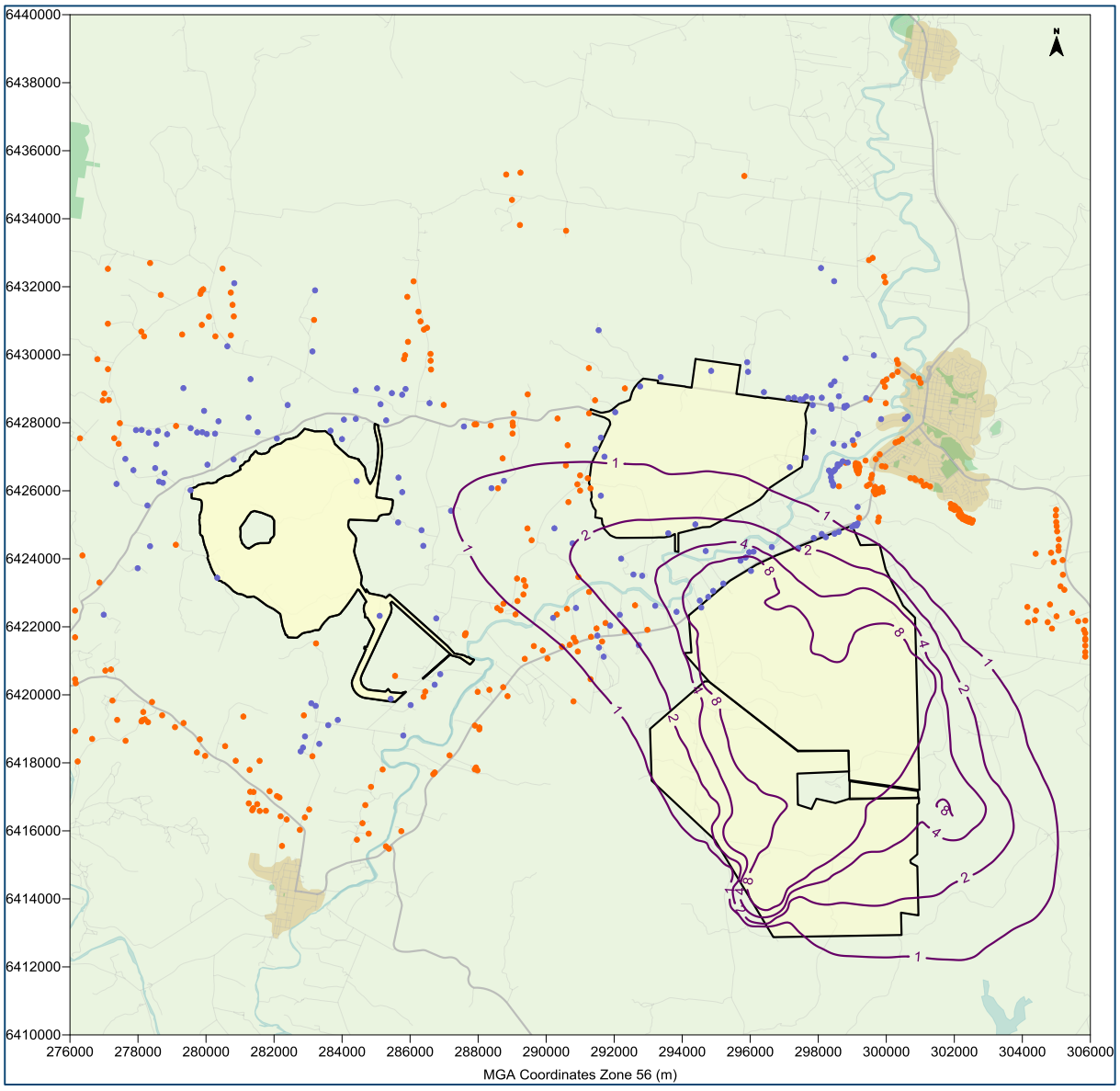


**Figure B-17: Predicted annual average $PM_{2.5}$ concentrations due to emissions from Mt Arthur in Scenario 3 (µg/m³)**

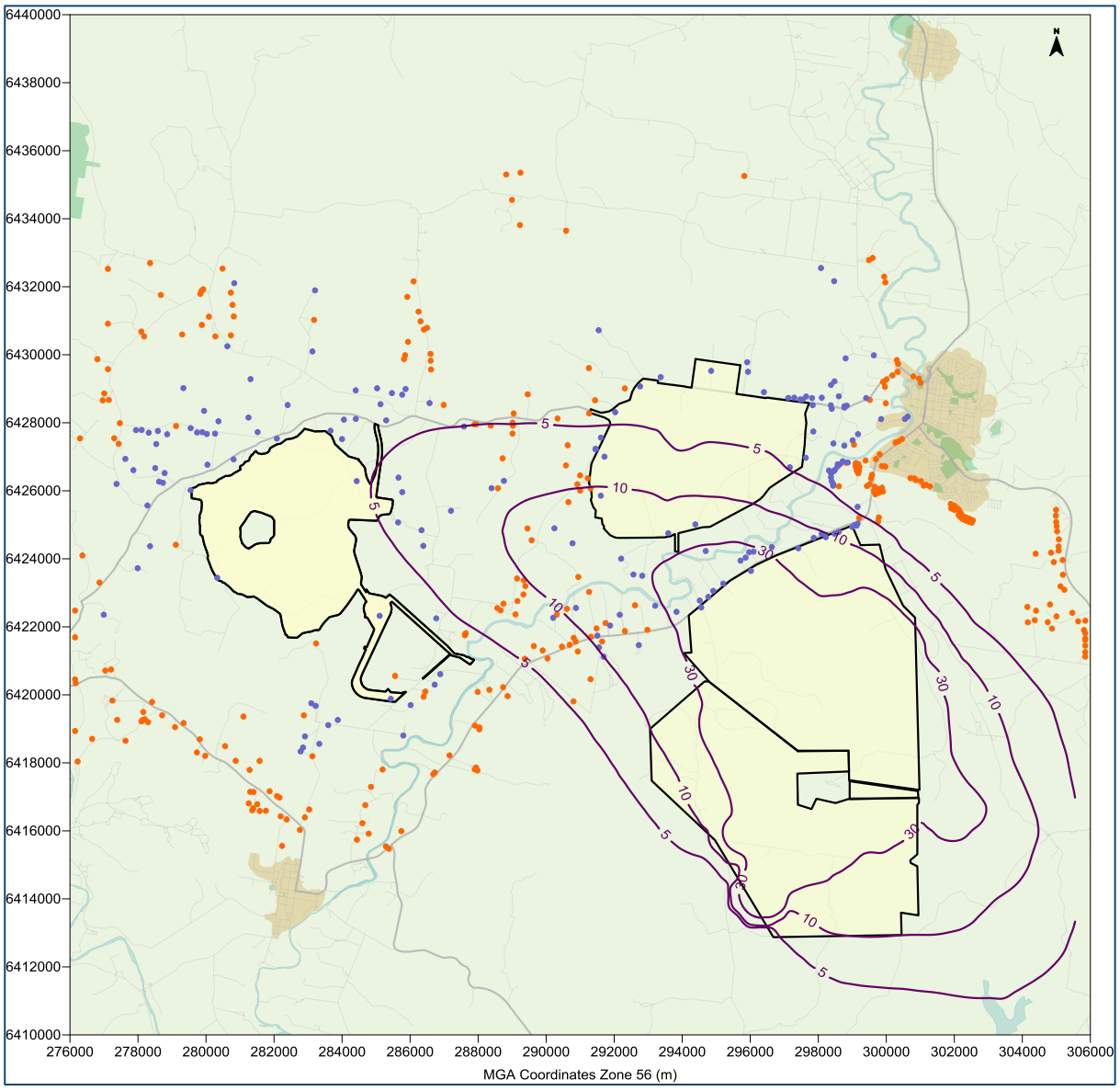


**Figure B-18: Predicted annual average $PM_{10}$ concentrations due to emissions from Mt Arthur in Scenario 3 (µg/m³)**

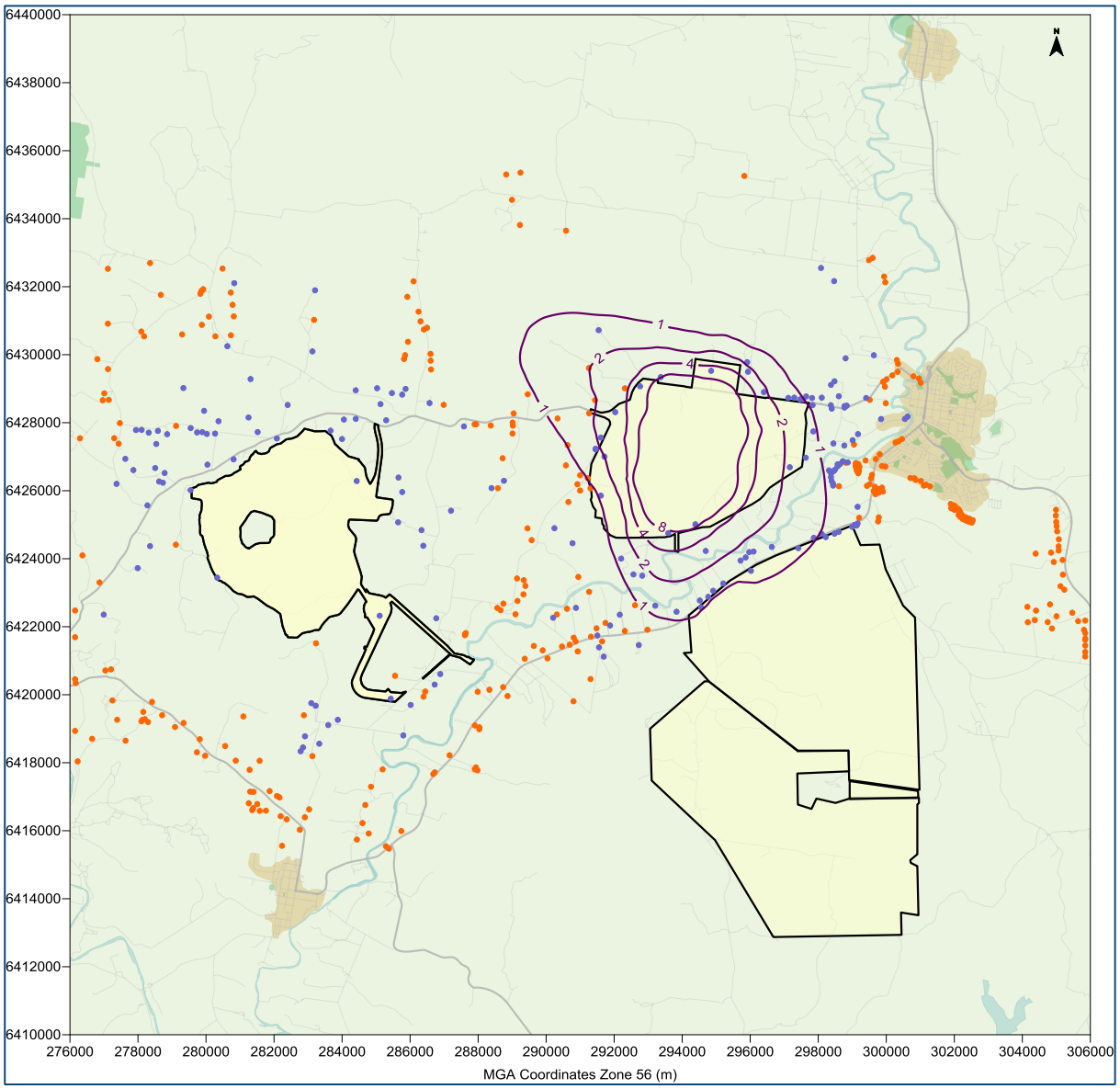


**Figure B-19: Predicted annual average $PM_{2.5}$ concentrations due to emissions from Bengalla in Scenario 3 (µg/m³)**

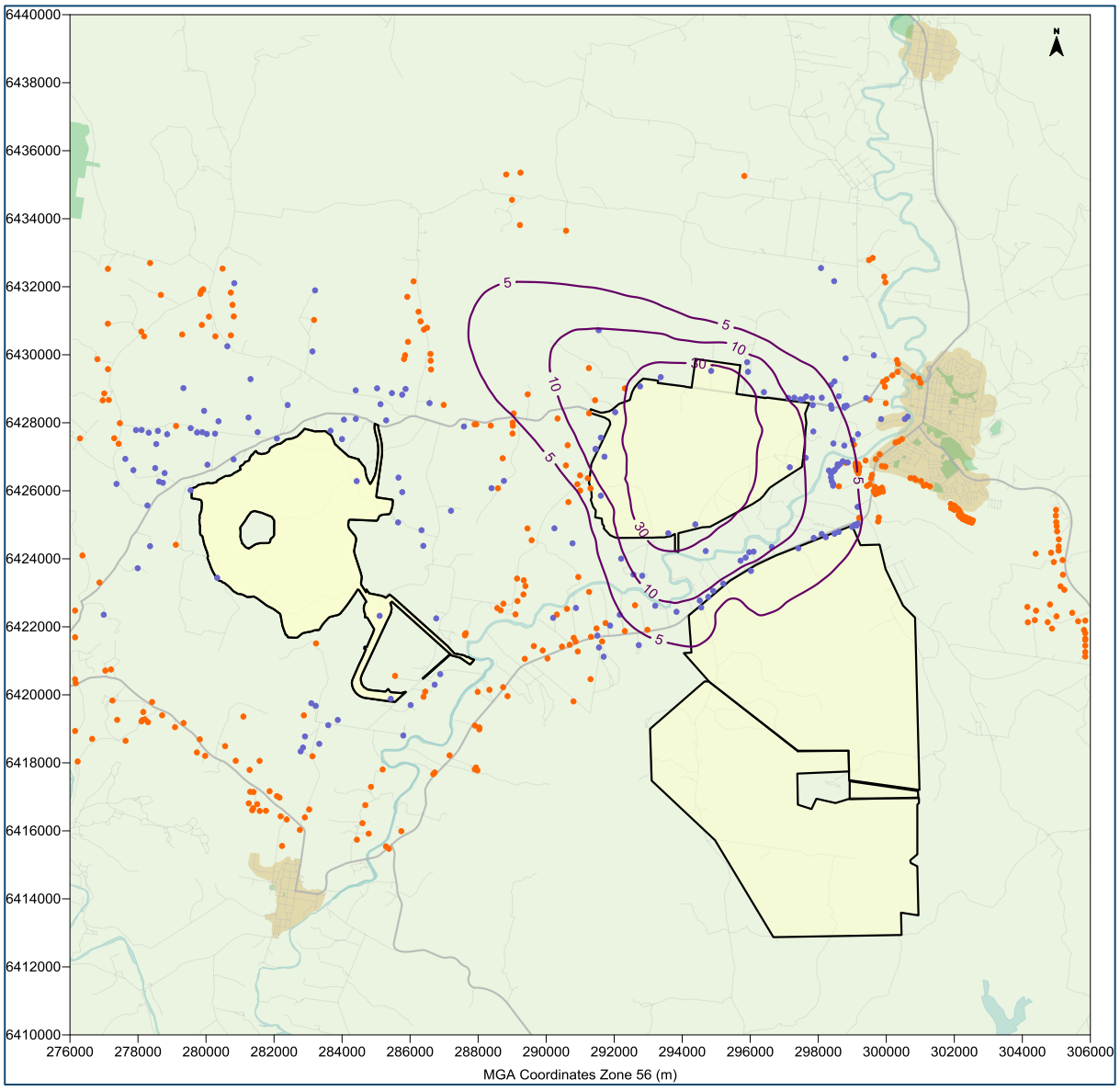


**Figure B-20: Predicted annual average $PM_{10}$ concentrations due to emissions from Bengalla in Scenario 3 (µg/m³)**

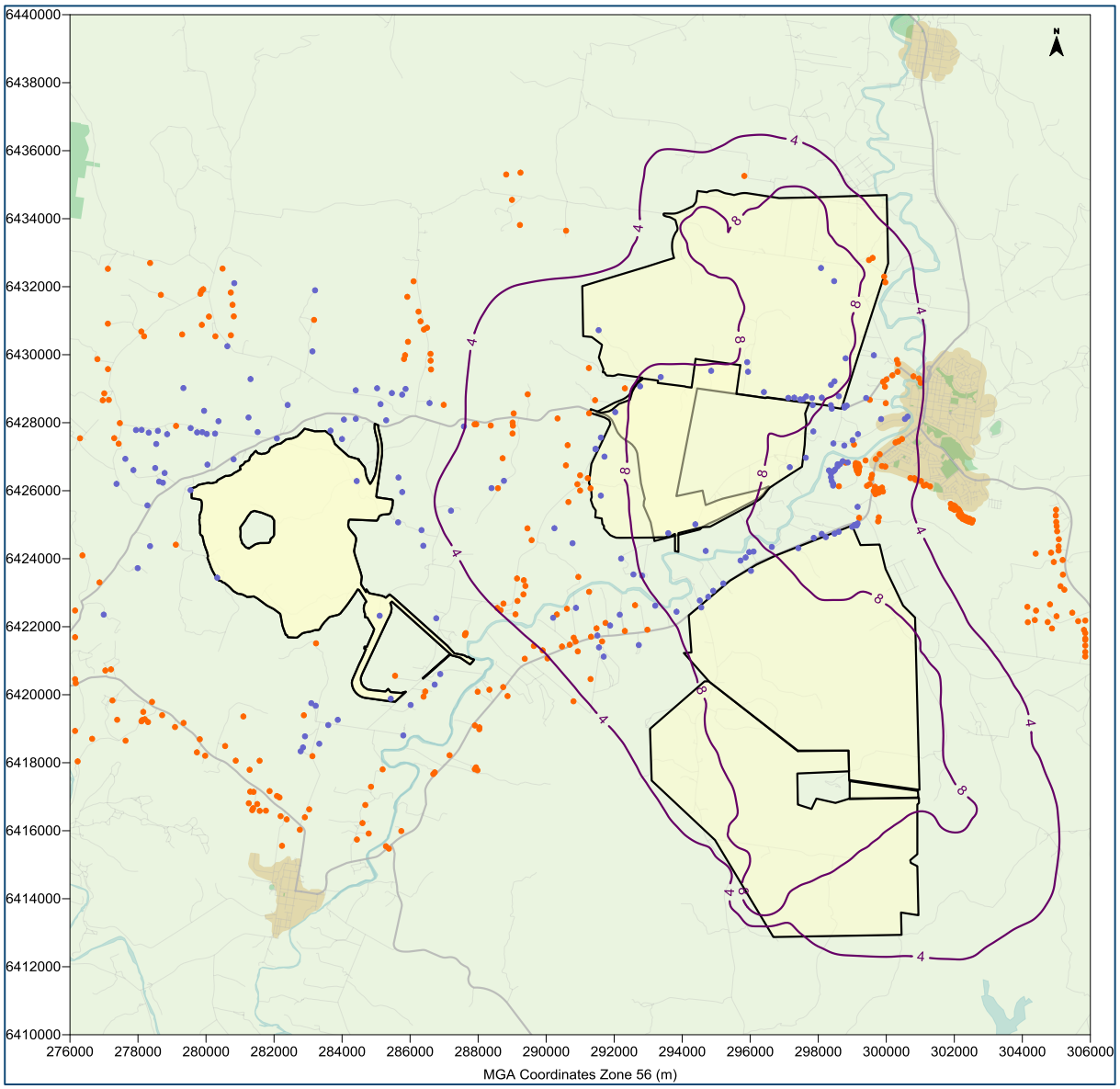


**Figure B-21: Predicted cumulative annual average $PM_{2.5}$ concentrations due to emissions from all sources in Scenario 3 (µg/m³)**

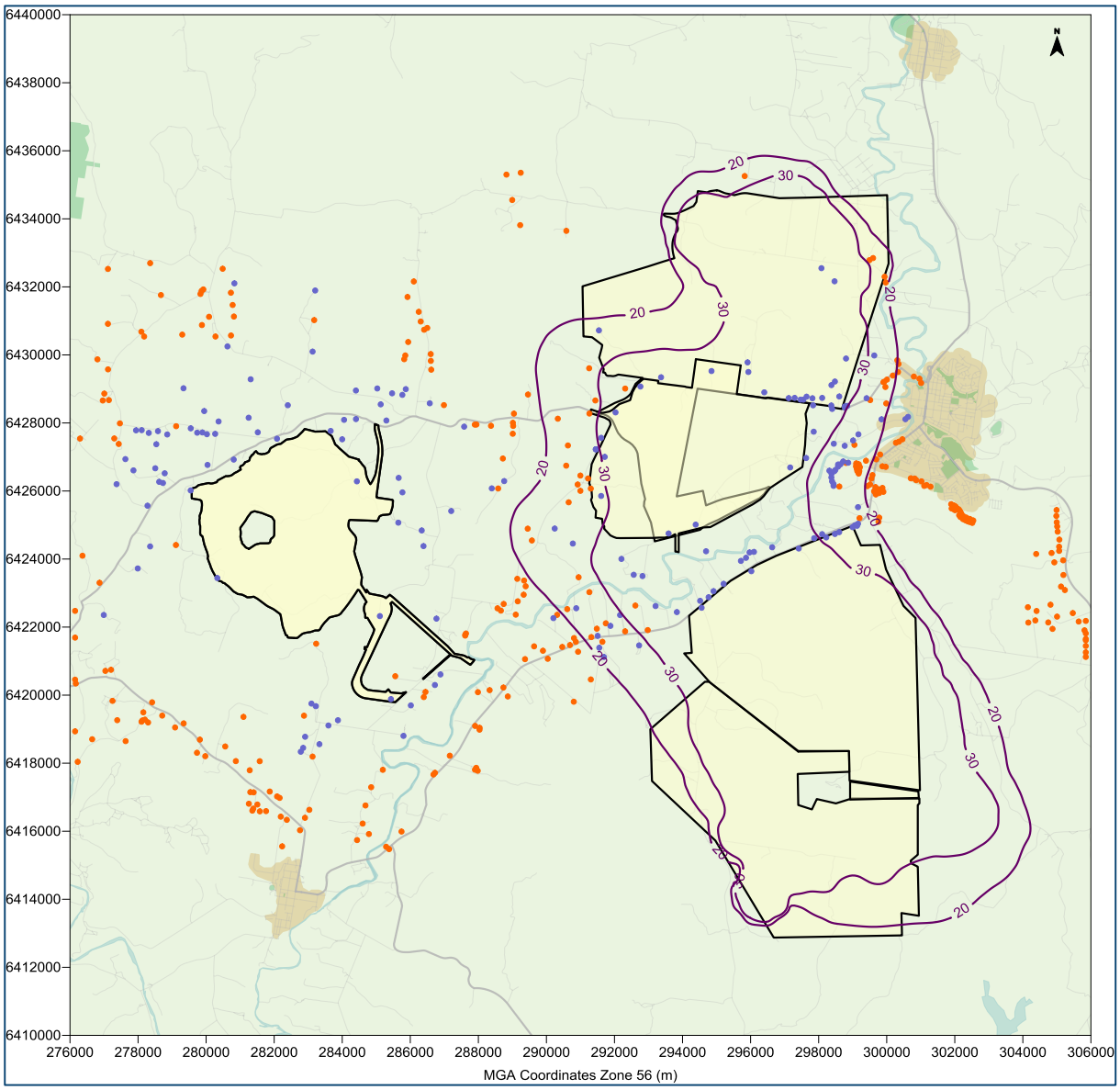


**Figure B-22: Predicted cumulative annual average $PM_{10}$ concentrations due to emissions from all sources in Scenario 3 (µg/m³)**

# Appendix C

## *Tabulated Results*

**Table C-1: Modelling predictions for annual average $PM_{2.5}$ impacts (µg/m³)**

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Advisory - 8µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P1(6)(66)() | 1.2 | 0.8 | 0.1 | 5.4 | 0.9 | 0.7 | 0.0 | 5.0 | 0.7 | 0.7 | - | 4.8 |
| M2(8)(64)() | 1.0 | 0.8 | 0.1 | 5.3 | 0.8 | 0.7 | 0.0 | 4.9 | 0.6 | 0.7 | - | 4.7 |
| M3(29)(44)() | 0.6 | 1.0 | 0.0 | 5.1 | 0.5 | 0.8 | 0.0 | 5.0 | 0.4 | 0.7 | - | 5.0 |
| P4(49a)(87N)() | 0.9 | 0.6 | 0.0 | 5.0 | 0.8 | 0.6 | 0.0 | 4.6 | 0.6 | 0.6 | - | 4.5 |
| P5(49b)(87S)() | 1.0 | 0.6 | 0.0 | 5.1 | 0.8 | 0.6 | 0.0 | 4.7 | 0.7 | 0.6 | - | 4.5 |
| P6(28)(43)() | 0.6 | 1.0 | 0.0 | 5.2 | 0.5 | 0.8 | 0.0 | 5.0 | 0.4 | 0.7 | - | 5.0 |
| P7(20)(53)() | 0.6 | 0.8 | 0.0 | 5.0 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.7 | - | 4.7 |
| P8(21)(57)() | 0.6 | 0.8 | 0.0 | 5.0 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.7 | - | 4.7 |
| P9(22)(59)() | 0.6 | 0.8 | 0.0 | 5.0 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.7 | - | 4.7 |
| P10(23)(60)() | 0.6 | 0.8 | 0.0 | 5.0 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.7 | - | 4.7 |
| P11(24)(58)() | 0.6 | 0.8 | 0.0 | 5.0 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.7 | - | 4.8 |
| P12(25)(51)() | 0.6 | 0.9 | 0.0 | 5.0 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.7 | - | 4.8 |
| P13(26)(52)() | 0.6 | 0.9 | 0.0 | 5.0 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.7 | - | 4.8 |
| P14(18)(55)() | 0.6 | 0.8 | 0.0 | 4.9 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.6 | - | 4.7 |
| P15(17)(50)() | 0.6 | 0.8 | 0.0 | 4.9 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.6 | - | 4.7 |
| P16(16)(48)() | 0.6 | 0.8 | 0.0 | 5.0 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.7 | - | 4.8 |
| P17(15)(47)() | 0.6 | 0.9 | 0.0 | 5.0 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.7 | - | 4.8 |
| P18(14)(49)() | 0.6 | 0.9 | 0.0 | 5.0 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.7 | - | 4.8 |
| P19(13)(62)() | 0.6 | 0.7 | 0.0 | 4.7 | 0.5 | 0.6 | 0.0 | 4.5 | 0.4 | 0.6 | - | 4.5 |
| P20(12)(61)() | 0.6 | 0.7 | 0.0 | 4.7 | 0.5 | 0.6 | 0.0 | 4.5 | 0.4 | 0.6 | - | 4.5 |
| P21(11)(46)() | 0.6 | 0.7 | 0.0 | 4.8 | 0.5 | 0.6 | 0.0 | 4.6 | 0.4 | 0.6 | - | 4.5 |
| M22(9)(M60)() | 1.0 | 1.2 | 0.1 | 5.7 | 0.8 | 1.0 | 0.0 | 5.4 | 0.6 | 0.9 | - | 5.2 |
| P23(10)(45)() | 1.0 | 1.1 | 0.1 | 5.5 | 0.8 | 0.9 | 0.0 | 5.2 | 0.6 | 0.8 | - | 5.1 |
| P24(30)(41)() | 0.6 | 0.9 | 0.0 | 5.0 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.7 | - | 4.8 |
| P25(31)(29)() | 0.5 | 0.9 | 0.0 | 5.0 | 0.4 | 0.7 | 0.0 | 4.9 | 0.3 | 0.7 | - | 5.0 |
| P26(32)(42)() | 0.6 | 0.8 | 0.0 | 4.9 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.7 | - | 4.8 |
| P27(33)(40)() | 0.5 | 0.8 | 0.0 | 4.8 | 0.4 | 0.6 | 0.0 | 4.7 | 0.3 | 0.6 | - | 4.7 |
| P28(36)(27E)() | 0.2 | 0.5 | 0.0 | 4.5 | 0.2 | 0.4 | 0.0 | 4.5 | 0.2 | 0.4 | - | 4.6 |
| P29(210)(118)() | 1.7 | 0.7 | 0.2 | 5.6 | 2.4 | 0.7 | 0.1 | 6.2 | 2.7 | 0.9 | - | 6.6 |
| P30(211)(119)() | 1.4 | 0.6 | 0.2 | 5.3 | 2.1 | 0.6 | 0.1 | 5.9 | 2.5 | 0.7 | - | 6.2 |
| M31(208)(M89)() | 1.3 | 0.5 | 0.2 | 5.0 | 1.9 | 0.5 | 0.2 | 5.5 | 2.1 | 0.7 | - | 5.8 |
| M32(207)(M88)() | 1.1 | 0.4 | 0.2 | 4.7 | 1.6 | 0.4 | 0.2 | 5.1 | 1.8 | 0.5 | - | 5.3 |
| P33(206)(114)() | 1.0 | 0.4 | 0.2 | 4.7 | 1.5 | 0.4 | 0.2 | 5.1 | 1.7 | 0.5 | - | 5.2 |
| P34(204)(113)() | 0.9 | 0.3 | 0.2 | 4.5 | 1.4 | 0.3 | 0.2 | 4.8 | 1.5 | 0.4 | - | 4.9 |
| P35(203)(112S)() | 0.8 | 0.3 | 0.2 | 4.3 | 1.2 | 0.3 | 0.2 | 4.7 | 1.4 | 0.4 | - | 4.7 |
| P36(197)(107)() | 0.5 | 0.2 | 0.3 | 4.0 | 0.8 | 0.2 | 0.3 | 4.2 | 0.8 | 0.2 | - | 4.0 |
| P37(196)(103)() | 0.5 | 0.2 | 0.3 | 4.0 | 0.8 | 0.2 | 0.3 | 4.2 | 0.8 | 0.2 | - | 4.0 |
| P38(187)(106)() | 0.7 | 0.2 | 0.3 | 4.2 | 1.0 | 0.2 | 0.2 | 4.5 | 1.1 | 0.3 | - | 4.3 |
| M39(184b)(M86)() | 0.8 | 0.3 | 0.2 | 4.3 | 1.2 | 0.3 | 0.2 | 4.7 | 1.3 | 0.4 | - | 4.7 |
| M40(199)(M91)() | 0.7 | 0.2 | 0.3 | 4.2 | 1.1 | 0.2 | 0.2 | 4.5 | 1.2 | 0.3 | - | 4.4 |
| M41(202)(M90)() | 1.0 | 0.3 | 0.2 | 4.5 | 1.3 | 0.3 | 0.2 | 4.8 | 1.5 | 0.4 | - | 4.8 |
| M42(212)(M50)() | 2.5 | 1.1 | 0.2 | 6.8 | 3.3 | 1.1 | 0.1 | 7.6 | 3.5 | 1.6 | - | 8.1 |
| P43(226)(120)() | 1.4 | 0.4 | 0.2 | 5.0 | 1.8 | 0.3 | 0.2 | 5.2 | 2.0 | 0.4 | - | 5.4 |
| M44(236)(M96)() | 1.0 | 0.2 | 0.2 | 4.5 | 1.1 | 0.2 | 0.2 | 4.4 | 1.1 | 0.3 | - | 4.3 |
| P45(264)(168)() | 0.6 | 2.2 | 0.1 | 6.1 | 0.5 | 2.6 | 0.0 | 6.3 | 0.5 | 3.6 | - | 7.3 |

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Advisory - 8µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P46(182)(92)(191) | 0.3 | 0.1 | 0.3 | 3.7 | 0.6 | 0.1 | 0.3 | 3.9 | 0.5 | 0.1 | - | 3.6 |
| P47(183)()(194) | 0.5 | 0.2 | 0.2 | 3.8 | 0.8 | 0.2 | 0.2 | 4.2 | 0.7 | 0.2 | - | 3.9 |
| P48(186)(105)(228) | 0.5 | 0.2 | 0.3 | 4.0 | 0.8 | 0.2 | 0.3 | 4.2 | 0.8 | 0.2 | - | 4.0 |
| P49(190)(93)(104) | 0.3 | 0.1 | 0.4 | 3.8 | 0.5 | 0.1 | 0.4 | 4.0 | 0.5 | 0.1 | - | 3.5 |
| P50(191)(98)(192) | 0.4 | 0.1 | 0.4 | 3.8 | 0.6 | 0.1 | 0.3 | 4.0 | 0.5 | 0.1 | - | 3.6 |
| P51(195)(102)(227) | 0.5 | 0.2 | 0.4 | 3.9 | 0.7 | 0.1 | 0.3 | 4.1 | 0.7 | 0.2 | - | 3.8 |
| P52(198)()(230) | 0.7 | 0.2 | 0.3 | 4.1 | 1.0 | 0.2 | 0.2 | 4.4 | 1.1 | 0.3 | - | 4.3 |
| P53(201)()(231) | 0.7 | 0.3 | 0.3 | 4.2 | 1.1 | 0.2 | 0.2 | 4.5 | 1.1 | 0.3 | - | 4.4 |
| M54(205)(M87)(233) | 0.9 | 0.3 | 0.2 | 4.4 | 1.3 | 0.3 | 0.2 | 4.8 | 1.4 | 0.4 | - | 4.8 |
| P55(209)(117)(275) | 1.1 | 0.5 | 0.2 | 4.8 | 1.7 | 0.5 | 0.2 | 5.3 | 1.9 | 0.6 | - | 5.5 |
| P56(200)(110N)(238) | 0.9 | 0.3 | 0.3 | 4.4 | 1.3 | 0.3 | 0.2 | 4.7 | 1.4 | 0.3 | - | 4.7 |
| P57(213a)(133N)(125A) | 0.6 | 0.1 | 0.5 | 4.1 | 0.8 | 0.1 | 0.4 | 4.3 | 0.9 | 0.2 | - | 4.0 |
| P58(213b)(133W)(125B) | 0.6 | 0.1 | 0.4 | 4.2 | 0.9 | 0.1 | 0.3 | 4.3 | 1.0 | 0.2 | - | 4.1 |
| P59(213c)(133S)(125C) | 0.6 | 0.1 | 0.5 | 4.2 | 0.8 | 0.1 | 0.4 | 4.3 | 0.9 | 0.2 | - | 4.0 |
| P60(216)(130)(240) | 0.6 | 0.2 | 0.4 | 4.1 | 0.9 | 0.2 | 0.3 | 4.3 | 1.0 | 0.2 | - | 4.1 |
| P61(218a)(126W)(241B) | 0.8 | 0.2 | 0.4 | 4.3 | 1.1 | 0.2 | 0.3 | 4.5 | 1.2 | 0.2 | - | 4.4 |
| P62(218b)(126N)(241C) | 0.8 | 0.2 | 0.4 | 4.4 | 1.1 | 0.2 | 0.3 | 4.5 | 1.3 | 0.2 | - | 4.4 |
| P63(218c)(126S)(241A) | 0.7 | 0.2 | 0.4 | 4.2 | 1.0 | 0.2 | 0.3 | 4.4 | 1.1 | 0.2 | - | 4.2 |
| P64(231)(145)(182A) | 0.8 | 0.2 | 0.4 | 4.4 | 1.1 | 0.2 | 0.3 | 4.5 | 1.2 | 0.2 | - | 4.4 |
| P65(232)(146)(182B) | 0.9 | 0.2 | 0.4 | 4.4 | 1.2 | 0.2 | 0.3 | 4.6 | 1.3 | 0.2 | - | 4.5 |
| P66(233a)(149W)(310) | 1.2 | 0.2 | 0.3 | 4.7 | 1.4 | 0.2 | 0.2 | 4.7 | 1.5 | 0.3 | - | 4.7 |
| P67(233b)(149S)(311) | 1.2 | 0.2 | 0.3 | 4.7 | 1.4 | 0.2 | 0.2 | 4.8 | 1.6 | 0.3 | - | 4.8 |
| P68(235)()(198) | 1.0 | 0.2 | 0.3 | 4.5 | 1.1 | 0.2 | 0.2 | 4.4 | 1.1 | 0.2 | - | 4.3 |
| P69(238)(152)(195) | 1.4 | 0.5 | 0.2 | 5.2 | 1.4 | 0.5 | 0.1 | 5.0 | 1.3 | 0.7 | - | 5.0 |
| P70(239)(153)(243) | 1.5 | 0.4 | 0.2 | 5.1 | 1.6 | 0.4 | 0.1 | 5.1 | 1.5 | 0.5 | - | 5.0 |
| P71(240)(154)(244) | 1.5 | 0.5 | 0.2 | 5.2 | 1.5 | 0.5 | 0.1 | 5.1 | 1.3 | 0.7 | - | 5.0 |
| P72(241)(155)(295) | 1.5 | 0.6 | 0.1 | 5.4 | 1.5 | 0.6 | 0.1 | 5.2 | 1.3 | 0.9 | - | 5.2 |
| P73(242a)(156E)(312) | 1.4 | 0.6 | 0.1 | 5.1 | 1.3 | 0.5 | 0.1 | 5.0 | 1.2 | 0.9 | - | 5.1 |
| P74(242b)(156W)(313) | 1.2 | 0.5 | 0.1 | 4.9 | 1.2 | 0.5 | 0.1 | 4.7 | 1.0 | 0.8 | - | 4.8 |
| P75(243)(192)(314) | 0.9 | 0.3 | 0.2 | 4.4 | 1.0 | 0.3 | 0.1 | 4.3 | 0.9 | 0.3 | - | 4.2 |
| M76(250)(M94)(202) | 1.1 | 1.0 | 0.1 | 5.2 | 1.0 | 0.9 | 0.1 | 5.0 | 0.9 | 1.7 | - | 5.6 |
| P77(252)(166)(246) | 0.7 | 1.2 | 0.1 | 5.1 | 0.7 | 1.3 | 0.1 | 5.1 | 0.6 | 1.8 | - | 5.4 |
| P78(254)()(315) | 0.7 | 0.7 | 0.1 | 4.6 | 0.7 | 0.8 | 0.1 | 4.5 | 0.6 | 1.1 | - | 4.7 |
| P79(257)()(250) | 0.8 | 0.4 | 0.1 | 4.3 | 0.8 | 0.4 | 0.1 | 4.2 | 0.7 | 0.6 | - | 4.2 |
| P80(259)(189)(251) | 0.7 | 0.3 | 0.1 | 4.2 | 0.7 | 0.3 | 0.1 | 4.1 | 0.7 | 0.5 | - | 4.1 |
| P81()(209S)(126B) | 0.3 | 0.4 | 0.1 | 3.7 | 0.3 | 0.4 | 0.0 | 3.7 | 0.3 | 0.5 | - | 3.8 |
| P82()(201)(321) | 0.4 | 0.3 | 0.1 | 3.7 | 0.4 | 0.4 | 0.0 | 3.7 | 0.4 | 0.4 | - | 3.7 |
| P83()(203)(174A) | 0.4 | 0.3 | 0.1 | 3.8 | 0.4 | 0.4 | 0.0 | 3.8 | 0.4 | 0.5 | - | 3.8 |
| P84()(200)(154) | 0.4 | 0.3 | 0.1 | 3.8 | 0.4 | 0.3 | 0.0 | 3.7 | 0.4 | 0.4 | - | 3.7 |
| P85()(199)(174B) | 0.4 | 0.3 | 0.1 | 3.8 | 0.4 | 0.4 | 0.0 | 3.8 | 0.4 | 0.5 | - | 3.8 |
| P86()(198)(175) | 0.5 | 0.3 | 0.1 | 3.9 | 0.5 | 0.4 | 0.1 | 3.8 | 0.4 | 0.4 | - | 3.8 |
| M87()(195)(162) | 0.6 | 0.3 | 0.1 | 4.0 | 0.6 | 0.3 | 0.1 | 3.9 | 0.6 | 0.4 | - | 3.9 |
| P88()(194)(111) | 0.6 | 0.3 | 0.1 | 4.0 | 0.6 | 0.3 | 0.1 | 3.9 | 0.6 | 0.4 | - | 3.9 |
| P89()(184)(249) | 0.7 | 0.5 | 0.1 | 4.3 | 0.7 | 0.5 | 0.1 | 4.2 | 0.6 | 0.7 | - | 4.3 |
| P90()(186S)(316) | 0.8 | 0.4 | 0.1 | 4.3 | 0.8 | 0.4 | 0.1 | 4.2 | 0.7 | 0.5 | - | 4.2 |
| P91()(161)(317) | 1.0 | 0.6 | 0.1 | 4.8 | 0.9 | 0.6 | 0.1 | 4.6 | 0.8 | 1.0 | - | 4.8 |

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Advisory - 8µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P92()(169)(320) | 0.7 | 1.4 | 0.1 | 5.2 | 0.6 | 1.6 | 0.0 | 5.3 | 0.5 | 1.9 | - | 5.5 |
| P93()(171)(319) | 0.5 | 1.3 | 0.1 | 5.0 | 0.4 | 1.6 | 0.0 | 5.1 | 0.4 | 2.0 | - | 5.5 |
| P94()(180)(248) | 0.6 | 0.7 | 0.1 | 4.3 | 0.6 | 0.7 | 0.1 | 4.3 | 0.5 | 0.9 | - | 4.4 |
| P95()(97)(34) | 0.2 | 0.1 | 0.6 | 3.8 | 0.4 | 0.1 | 0.7 | 4.0 | 0.3 | 0.1 | - | 3.4 |
| P96()(90)(193) | 0.3 | 0.1 | 0.4 | 3.8 | 0.5 | 0.1 | 0.4 | 3.9 | 0.4 | 0.1 | - | 3.5 |
| P97()(88N)(183A) | 0.2 | 0.1 | 0.3 | 3.6 | 0.4 | 0.1 | 0.3 | 3.7 | 0.3 | 0.1 | - | 3.4 |
| P98()(88S)(183B) | 0.2 | 0.1 | 0.3 | 3.6 | 0.4 | 0.1 | 0.3 | 3.7 | 0.3 | 0.1 | - | 3.4 |
| P99()(88W)(183C) | 0.2 | 0.1 | 0.3 | 3.6 | 0.4 | 0.1 | 0.3 | 3.7 | 0.3 | 0.1 | - | 3.4 |
| P100()(96)(132A) | 0.2 | 0.1 | 0.4 | 3.7 | 0.4 | 0.1 | 0.5 | 3.9 | 0.3 | 0.1 | - | 3.3 |
| P101(34)()() | 0.4 | 0.6 | 0.0 | 4.5 | 0.4 | 0.5 | 0.0 | 4.4 | 0.3 | 0.5 | - | 4.5 |
| P102(37a)()() | 0.5 | 0.6 | 0.0 | 4.5 | 0.4 | 0.5 | 0.0 | 4.4 | 0.3 | 0.5 | - | 4.4 |
| P103(184a)()() | 0.9 | 0.3 | 0.2 | 4.4 | 1.3 | 0.3 | 0.2 | 4.8 | 1.5 | 0.4 | - | 4.8 |
| P104(37b)()() | 0.5 | 0.6 | 0.0 | 4.5 | 0.4 | 0.5 | 0.0 | 4.4 | 0.3 | 0.5 | - | 4.4 |
| P105(41)()() | 0.7 | 0.7 | 0.0 | 4.7 | 0.5 | 0.6 | 0.0 | 4.5 | 0.4 | 0.6 | - | 4.4 |
| P106(42)()() | 0.7 | 0.7 | 0.0 | 4.7 | 0.5 | 0.6 | 0.0 | 4.5 | 0.4 | 0.6 | - | 4.4 |
| P107(27)()() | 0.6 | 0.9 | 0.0 | 5.0 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.7 | - | 4.8 |
| P108(39)()() | 0.6 | 0.7 | 0.0 | 4.7 | 0.5 | 0.6 | 0.0 | 4.5 | 0.4 | 0.6 | - | 4.4 |
| P109(40)()() | 0.6 | 0.7 | 0.0 | 4.7 | 0.5 | 0.6 | 0.0 | 4.5 | 0.4 | 0.5 | - | 4.4 |
| P110(43)()() | 0.7 | 0.7 | 0.0 | 4.7 | 0.6 | 0.6 | 0.0 | 4.5 | 0.4 | 0.6 | - | 4.4 |
| P111(56)()() | 0.4 | 0.5 | 0.0 | 4.2 | 0.4 | 0.4 | 0.0 | 4.1 | 0.3 | 0.4 | - | 4.1 |
| P112(57)()() | 0.4 | 0.4 | 0.0 | 4.2 | 0.4 | 0.4 | 0.0 | 4.1 | 0.3 | 0.4 | - | 4.1 |
| P113(58)()() | 0.4 | 0.4 | 0.0 | 4.1 | 0.4 | 0.4 | 0.0 | 4.0 | 0.3 | 0.4 | - | 4.0 |
| P114(59)()() | 0.4 | 0.4 | 0.0 | 4.1 | 0.3 | 0.4 | 0.0 | 4.0 | 0.3 | 0.4 | - | 4.0 |
| P115(60)()() | 0.4 | 0.4 | 0.0 | 4.1 | 0.4 | 0.4 | 0.0 | 4.0 | 0.3 | 0.4 | - | 3.9 |
| P116(61)()() | 0.4 | 0.4 | 0.0 | 4.0 | 0.3 | 0.4 | 0.0 | 3.9 | 0.3 | 0.4 | - | 3.9 |
| P117(62)()() | 0.4 | 0.4 | 0.0 | 4.0 | 0.3 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | - | 3.9 |
| P118(69)()() | 0.2 | 0.1 | 0.0 | 3.3 | 0.2 | 0.1 | 0.0 | 3.3 | 0.1 | 0.1 | - | 3.3 |
| P119(70)()() | 0.2 | 0.1 | 0.0 | 3.3 | 0.2 | 0.1 | 0.0 | 3.3 | 0.1 | 0.1 | - | 3.3 |
| P120(71)()() | 0.2 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | 0.0 | 3.3 | 0.2 | 0.1 | - | 3.3 |
| P121(72)()() | 0.2 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | 0.0 | 3.3 | 0.2 | 0.1 | - | 3.3 |
| P122(73)()() | 0.2 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | 0.0 | 3.3 | 0.2 | 0.1 | - | 3.3 |
| P123(75)()() | 0.2 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | 0.0 | 3.3 | 0.2 | 0.1 | - | 3.3 |
| P124(76)()() | 0.2 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | 0.0 | 3.3 | 0.2 | 0.1 | - | 3.3 |
| P125(77a)()() | 0.3 | 0.1 | 0.0 | 3.5 | 0.2 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | - | 3.4 |
| P126(77b)()() | 0.2 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | 0.0 | 3.3 | 0.2 | 0.1 | - | 3.3 |
| P127(78)()() | 0.3 | 0.2 | 0.0 | 3.6 | 0.3 | 0.2 | 0.0 | 3.4 | 0.2 | 0.2 | - | 3.4 |
| P128(79a)()() | 0.2 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | 0.0 | 3.3 | 0.2 | 0.1 | - | 3.3 |
| P129(79b)()() | 0.3 | 0.1 | 0.0 | 3.5 | 0.2 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | - | 3.4 |
| P130(82)()() | 0.3 | 0.1 | 0.0 | 3.5 | 0.3 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | - | 3.4 |
| P131(83)()() | 0.3 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | - | 3.3 |
| P132(85)()() | 0.3 | 0.1 | 0.0 | 3.5 | 0.3 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | - | 3.4 |
| P133(86)()() | 0.3 | 0.1 | 0.0 | 3.5 | 0.3 | 0.1 | 0.0 | 3.4 | 0.3 | 0.1 | - | 3.4 |
| P134(87)()() | 0.4 | 0.1 | 0.0 | 3.6 | 0.3 | 0.1 | 0.0 | 3.5 | 0.3 | 0.1 | - | 3.4 |
| P135(88)()() | 0.4 | 0.1 | 0.0 | 3.6 | 0.3 | 0.1 | 0.0 | 3.5 | 0.3 | 0.2 | - | 3.4 |
| P136(89)()() | 0.4 | 0.2 | 0.0 | 3.8 | 0.4 | 0.2 | 0.0 | 3.5 | 0.3 | 0.2 | - | 3.5 |
| P137(90)()() | 0.5 | 0.2 | 0.0 | 3.9 | 0.4 | 0.2 | 0.0 | 3.6 | 0.4 | 0.2 | - | 3.5 |

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Advisory - 8µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P138(91)()() | 0.5 | 0.2 | 0.0 | 4.2 | 0.4 | 0.2 | 0.0 | 3.6 | 0.4 | 0.2 | - | 3.6 |
| P139(92)()() | 0.5 | 0.2 | 0.0 | 3.9 | 0.4 | 0.2 | 0.0 | 3.6 | 0.4 | 0.2 | - | 3.5 |
| P140(93)()() | 0.4 | 0.1 | 0.0 | 3.8 | 0.4 | 0.1 | 0.0 | 3.5 | 0.3 | 0.1 | - | 3.5 |
| P141(94)()() | 0.4 | 0.1 | 0.0 | 3.8 | 0.4 | 0.1 | 0.0 | 3.5 | 0.4 | 0.1 | - | 3.5 |
| P142(95)()() | 0.3 | 0.1 | 0.0 | 3.5 | 0.3 | 0.1 | 0.0 | 3.3 | 0.3 | 0.1 | - | 3.3 |
| P143(96)()() | 0.3 | 0.1 | 0.0 | 3.4 | 0.2 | 0.1 | 0.0 | 3.3 | 0.2 | 0.1 | - | 3.3 |
| P144(97)()() | 0.3 | 0.1 | 0.0 | 3.5 | 0.3 | 0.1 | 0.0 | 3.3 | 0.3 | 0.1 | - | 3.3 |
| P145(98)()() | 0.3 | 0.1 | 0.0 | 3.5 | 0.3 | 0.1 | 0.0 | 3.3 | 0.3 | 0.1 | - | 3.3 |
| P146(99a)()() | 0.3 | 0.1 | 0.0 | 3.5 | 0.3 | 0.1 | 0.0 | 3.3 | 0.3 | 0.1 | - | 3.3 |
| P147(99b)()() | 0.3 | 0.1 | 0.0 | 3.5 | 0.3 | 0.1 | 0.0 | 3.3 | 0.3 | 0.1 | - | 3.3 |
| P148(100)()() | 0.3 | 0.1 | 0.0 | 3.5 | 0.3 | 0.1 | 0.0 | 3.3 | 0.3 | 0.1 | - | 3.3 |
| P149(IR1)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.8 | 0.3 | 0.3 | - | 3.7 |
| P150(IR2)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.8 | 0.3 | 0.3 | - | 3.7 |
| P151(IR3)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.8 | 0.3 | 0.3 | - | 3.7 |
| P152(IR4)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P153(IR5)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P154(IR6)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P155(IR7)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P156(IR8)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P157(IR9)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P158(IR10)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P159(IR11)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P160(IR12)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.8 | 0.3 | 0.3 | - | 3.7 |
| P161(IR13)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.8 | 0.3 | 0.3 | - | 3.7 |
| P162(IR14)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.8 | 0.3 | 0.3 | - | 3.8 |
| P163(IR15)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P164(IR16)()() | 0.4 | 0.3 | 0.0 | 3.8 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P165(IR17)()() | 0.4 | 0.3 | 0.0 | 3.8 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.6 |
| P166(IR18)()() | 0.4 | 0.3 | 0.0 | 3.8 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.6 |
| P167(IR19)()() | 0.4 | 0.3 | 0.0 | 3.8 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.6 |
| P168(IR20)()() | 0.4 | 0.3 | 0.0 | 3.8 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P169(IR21)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P170(IR22)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P171(IR23)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P172(IR24)()() | 0.4 | 0.3 | 0.0 | 3.9 | 0.3 | 0.3 | 0.0 | 3.7 | 0.3 | 0.3 | - | 3.7 |
| P173(101)()() | 0.3 | 0.1 | 0.0 | 3.6 | 0.3 | 0.1 | 0.0 | 3.3 | 0.3 | 0.1 | - | 3.3 |
| P174(102)()() | 0.3 | 0.1 | 0.0 | 3.6 | 0.3 | 0.1 | 0.0 | 3.4 | 0.3 | 0.1 | - | 3.3 |
| P175(184c)()() | 0.6 | 0.2 | 0.2 | 4.1 | 1.0 | 0.2 | 0.2 | 4.4 | 1.0 | 0.3 | - | 4.2 |
| P176()(2)() | 0.2 | 0.4 | 0.0 | 4.4 | 0.2 | 0.3 | 0.0 | 4.6 | 0.1 | 0.3 | - | 4.5 |
| P177()(3)() | 0.2 | 0.4 | 0.0 | 4.4 | 0.2 | 0.3 | 0.0 | 4.6 | 0.1 | 0.3 | - | 4.5 |
| P178()(7)() | 0.2 | 0.3 | 0.0 | 3.9 | 0.1 | 0.3 | 0.0 | 4.1 | 0.1 | 0.3 | - | 4.0 |
| P179()(8)() | 0.2 | 0.3 | 0.0 | 3.9 | 0.1 | 0.3 | 0.0 | 4.0 | 0.1 | 0.3 | - | 4.0 |
| P180()(12)() | 0.2 | 0.3 | 0.0 | 4.0 | 0.2 | 0.3 | 0.0 | 4.2 | 0.1 | 0.3 | - | 4.1 |
| P181()(17)() | 0.2 | 0.4 | 0.0 | 4.4 | 0.2 | 0.4 | 0.0 | 4.6 | 0.1 | 0.3 | - | 4.5 |
| P182()(19)() | 0.2 | 0.4 | 0.0 | 4.5 | 0.2 | 0.4 | 0.0 | 4.7 | 0.1 | 0.4 | - | 4.6 |
| P183()(22)() | 0.2 | 0.5 | 0.0 | 4.7 | 0.2 | 0.4 | 0.0 | 4.8 | 0.2 | 0.4 | - | 4.8 |

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Advisory - 8µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P184()(23)() | 0.2 | 0.5 | 0.0 | 4.7 | 0.2 | 0.4 | 0.0 | 4.8 | 0.2 | 0.4 | - | 4.8 |
| P185()(24)() | 0.2 | 0.5 | 0.0 | 4.7 | 0.2 | 0.4 | 0.0 | 4.9 | 0.2 | 0.4 | - | 4.8 |
| P186()(25)() | 0.2 | 0.5 | 0.0 | 4.6 | 0.2 | 0.4 | 0.0 | 4.8 | 0.2 | 0.4 | - | 4.8 |
| P187()(27W)() | 0.3 | 0.6 | 0.0 | 4.9 | 0.2 | 0.5 | 0.0 | 4.9 | 0.2 | 0.5 | - | 5.1 |
| P188()(30)() | 0.3 | 0.5 | 0.0 | 4.1 | 0.3 | 0.4 | 0.0 | 4.1 | 0.2 | 0.4 | - | 4.2 |
| P189()(31)() | 0.3 | 0.5 | 0.0 | 4.2 | 0.3 | 0.4 | 0.0 | 4.2 | 0.2 | 0.4 | - | 4.2 |
| P190()(33)() | 0.3 | 0.5 | 0.0 | 4.2 | 0.3 | 0.4 | 0.0 | 4.2 | 0.2 | 0.4 | - | 4.3 |
| P191()(39)() | 0.5 | 0.7 | 0.0 | 4.6 | 0.4 | 0.6 | 0.0 | 4.5 | 0.3 | 0.5 | - | 4.5 |
| P192()(54)() | 0.6 | 0.8 | 0.0 | 4.9 | 0.5 | 0.7 | 0.0 | 4.8 | 0.4 | 0.6 | - | 4.7 |
| P193()(81)() | 0.6 | 0.6 | 0.0 | 4.6 | 0.5 | 0.5 | 0.0 | 4.4 | 0.4 | 0.5 | - | 4.3 |
| P194()(83)() | 0.6 | 0.6 | 0.0 | 4.6 | 0.5 | 0.6 | 0.0 | 4.4 | 0.4 | 0.5 | - | 4.4 |
| P195()(84)() | 0.6 | 0.6 | 0.0 | 4.6 | 0.5 | 0.5 | 0.0 | 4.4 | 0.4 | 0.5 | - | 4.3 |
| P196()(63)() | 0.7 | 0.7 | 0.0 | 4.8 | 0.6 | 0.6 | 0.0 | 4.6 | 0.4 | 0.6 | - | 4.5 |
| M197()(M37)() | 0.6 | 1.0 | 0.0 | 5.3 | 0.5 | 0.8 | 0.0 | 5.1 | 0.4 | 0.8 | - | 5.1 |
| M198()(M92)() | 1.6 | 0.4 | 0.2 | 5.2 | 1.8 | 0.3 | 0.2 | 5.3 | 2.0 | 0.5 | - | 5.4 |
| P199()(110S)() | 0.7 | 0.3 | 0.3 | 4.2 | 1.1 | 0.2 | 0.2 | 4.5 | 1.2 | 0.3 | - | 4.4 |
| P200()(85)() | 0.6 | 0.6 | 0.0 | 4.6 | 0.5 | 0.6 | 0.0 | 4.4 | 0.4 | 0.5 | - | 4.4 |
| P201()(108)() | 0.6 | 0.2 | 0.3 | 4.1 | 0.9 | 0.2 | 0.2 | 4.3 | 1.0 | 0.3 | - | 4.2 |
| P202()(112N)() | 1.3 | 0.4 | 0.2 | 4.9 | 1.7 | 0.4 | 0.2 | 5.2 | 1.9 | 0.5 | - | 5.4 |
| | | | | | | | | | | | | |
| P204()(156S)() | 1.4 | 0.6 | 0.1 | 5.2 | 1.4 | 0.6 | 0.1 | 5.1 | 1.2 | 1.0 | - | 5.2 |
| M205()(158)() | 1.1 | 1.0 | 0.1 | 5.2 | 1.0 | 0.9 | 0.1 | 5.0 | 0.9 | 1.7 | - | 5.6 |
| P206()(186N)() | 0.7 | 0.4 | 0.1 | 4.3 | 0.7 | 0.4 | 0.1 | 4.2 | 0.7 | 0.6 | - | 4.2 |
| P207()(209E)() | 0.3 | 0.4 | 0.0 | 3.7 | 0.3 | 0.4 | 0.0 | 3.7 | 0.3 | 0.5 | - | 3.7 |
| P208()(209W)() | 0.3 | 0.3 | 0.0 | 3.6 | 0.3 | 0.4 | 0.0 | 3.6 | 0.3 | 0.5 | - | 3.7 |
| P209()(209N)() | 0.2 | 0.3 | 0.0 | 3.6 | 0.2 | 0.4 | 0.0 | 3.6 | 0.2 | 0.5 | - | 3.7 |
| P210()(222)() | 0.2 | 0.3 | 0.0 | 3.6 | 0.2 | 0.3 | 0.0 | 3.6 | 0.2 | 0.3 | - | 3.6 |
| P211()(230)() | 0.2 | 0.3 | 0.0 | 3.7 | 0.2 | 0.3 | 0.0 | 3.8 | 0.2 | 0.3 | - | 3.7 |
| P212()(252)() | 0.1 | 0.1 | 0.0 | 3.5 | 0.1 | 0.1 | 0.0 | 4.3 | 0.1 | 0.1 | - | 5.1 |
| P213()(286)() | 0.2 | 0.2 | 0.0 | 3.4 | 0.1 | 0.2 | 0.0 | 3.5 | 0.1 | 0.2 | - | 3.5 |
| P214()(287)() | 0.2 | 0.2 | 0.0 | 3.4 | 0.1 | 0.2 | 0.0 | 3.5 | 0.1 | 0.2 | - | 3.5 |
| P215()(288)() | 0.2 | 0.2 | 0.0 | 3.5 | 0.2 | 0.2 | 0.0 | 3.5 | 0.2 | 0.3 | - | 3.6 |
| P216()(289N)() | 0.1 | 0.2 | 0.0 | 4.7 | 0.1 | 0.1 | 0.0 | 5.5 | 0.1 | 0.1 | - | 4.7 |
| P217()(289S)() | 0.1 | 0.2 | 0.0 | 4.7 | 0.1 | 0.1 | 0.0 | 5.1 | 0.1 | 0.1 | - | 4.5 |
| P218()(292W)() | 0.1 | 0.1 | 0.0 | 5.2 | 0.1 | 0.1 | 0.0 | 7.0 | 0.1 | 0.1 | - | 5.5 |
| P219()(292E)() | 0.1 | 0.1 | 0.0 | 4.9 | 0.1 | 0.1 | 0.0 | 6.6 | 0.1 | 0.1 | - | 5.4 |
| M220()(M1)() | 0.4 | 0.9 | 0.0 | 4.4 | 0.3 | 1.0 | 0.0 | 4.5 | 0.3 | 1.3 | - | 4.8 |
| M221()(M2)() | 0.6 | 2.9 | 0.1 | 7.2 | 0.5 | 3.5 | 0.0 | 7.8 | 0.4 | 8.0 | - | **11.7** |
| M222()(M3)() | 0.5 | 6.0 | 0.0 | **10.2** | 0.4 | 3.8 | 0.0 | 8.3 | 0.3 | 4.9 | - | **9.0** |
| M223()(M4)() | 0.4 | 3.2 | 0.0 | 8.2 | 0.4 | 2.2 | 0.0 | 7.3 | 0.3 | 1.7 | - | **8.7** |
| M224()(M5)() | 0.4 | 4.8 | 0.0 | **9.7** | 0.4 | 3.3 | 0.0 | 8.4 | 0.3 | 2.3 | - | **9.0** |
| M225()(M6)() | 0.5 | 5.0 | 0.0 | **9.8** | 0.4 | 3.1 | 0.0 | 8.3 | 0.4 | 2.0 | - | **9.0** |
| M226()(M7)() | 0.5 | 2.3 | 0.0 | 6.9 | 0.4 | 1.6 | 0.0 | 6.7 | 0.3 | 1.3 | - | **15.4** |
| M227()(M8)() | 0.1 | 0.2 | 0.0 | **8.6** | 0.1 | 0.2 | 0.0 | **17.6** | 0.1 | 0.1 | - | **14.5** |
| M228()(M9)() | 0.1 | 0.2 | 0.0 | **115** | 0.1 | 0.2 | 0.0 | **49.3** | 0.1 | 0.2 | - | **51.3** |
| M229()(M10)() | 0.2 | 0.5 | 0.0 | 6.1 | 0.2 | 0.5 | 0.0 | 8.1 | 0.2 | 0.4 | - | 8.2 |

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Advisory - 8µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| M230()(M11)() | 0.2 | 0.4 | 0.0 | 5.7 | 0.2 | 0.4 | 0.0 | 5.6 | 0.1 | 0.4 | - | 5.3 |
| M231()(M12)() | 0.4 | 1.7 | 0.0 | 6.1 | 0.4 | 1.2 | 0.0 | 6.1 | 0.3 | 1.0 | - | **15.1** |
| M232()(M13)() | 0.3 | 0.8 | 0.0 | 6.1 | 0.3 | 0.7 | 0.0 | 7.4 | 0.2 | 0.6 | - | **10.8** |
| M233()(M14)() | 0.3 | 0.9 | 0.0 | 6.0 | 0.3 | 0.7 | 0.0 | 7.0 | 0.2 | 0.6 | - | **11.0** |
| M234()(M15)() | 0.3 | 0.9 | 0.0 | 5.4 | 0.3 | 0.7 | 0.0 | 5.9 | 0.2 | 0.6 | - | 6.9 |
| M235()(M16)() | 0.3 | 0.9 | 0.0 | 5.2 | 0.3 | 0.7 | 0.0 | 5.5 | 0.2 | 0.6 | - | 5.9 |
| M236()(M17)() | 0.4 | 0.8 | 0.0 | 4.9 | 0.4 | 0.6 | 0.0 | 4.9 | 0.3 | 0.6 | - | 5.0 |
| M237()(M18)() | 0.5 | 0.9 | 0.0 | 5.0 | 0.4 | 0.7 | 0.0 | 5.0 | 0.3 | 0.7 | - | 5.1 |
| M238()(M94)() | 1.1 | 1.0 | 0.1 | 5.2 | 1.0 | 0.9 | 0.1 | 5.0 | 0.9 | 1.7 | - | 5.6 |
| M239()(M19)() | 0.4 | 2.0 | 0.0 | 6.4 | 0.4 | 1.4 | 0.0 | 6.3 | 0.3 | 1.1 | - | **19.7** |
| M240()(M20)() | 0.4 | 1.8 | 0.0 | 6.3 | 0.4 | 1.3 | 0.0 | 6.3 | 0.3 | 1.1 | - | **16.7** |
| M241()(M21)() | 0.4 | 1.5 | 0.0 | 5.8 | 0.4 | 1.1 | 0.0 | 5.9 | 0.3 | 0.9 | - | **13.0** |
| M242()(M22)() | 0.4 | 1.3 | 0.0 | 5.7 | 0.4 | 1.0 | 0.0 | 5.8 | 0.3 | 0.9 | - | **10.1** |
| M243()(M23)() | 0.4 | 1.1 | 0.0 | 5.5 | 0.3 | 0.9 | 0.0 | 5.8 | 0.3 | 0.8 | - | 8.2 |
| M244()(M24)() | 0.4 | 1.4 | 0.0 | 5.9 | 0.4 | 1.1 | 0.0 | 6.0 | 0.3 | 0.9 | - | **10.1** |
| M245()(M25)() | 0.4 | 1.1 | 0.0 | 5.4 | 0.3 | 0.8 | 0.0 | 5.7 | 0.3 | 0.7 | - | 7.0 |
| M246()(M26)() | 0.4 | 1.1 | 0.0 | 5.4 | 0.3 | 0.8 | 0.0 | 5.7 | 0.3 | 0.7 | - | 6.8 |
| M247()(M27)() | 0.3 | 0.6 | 0.0 | 5.0 | 0.2 | 0.5 | 0.0 | 5.1 | 0.2 | 0.5 | - | 5.2 |
| M248()(M28)() | 0.3 | 0.8 | 0.0 | 5.2 | 0.3 | 0.7 | 0.0 | 5.4 | 0.2 | 0.6 | - | 5.8 |
| M249()(M29)() | 0.3 | 0.9 | 0.0 | 5.2 | 0.3 | 0.7 | 0.0 | 5.5 | 0.3 | 0.6 | - | 5.9 |
| M250()(M30)() | 0.3 | 0.6 | 0.0 | 4.5 | 0.3 | 0.5 | 0.0 | 4.5 | 0.2 | 0.5 | - | 4.6 |
| M251()(M31)() | 0.2 | 0.4 | 0.0 | 4.1 | 0.2 | 0.4 | 0.0 | 4.1 | 0.2 | 0.4 | - | 4.2 |
| M252()(M32)() | 0.2 | 0.4 | 0.0 | 4.1 | 0.2 | 0.4 | 0.0 | 4.2 | 0.2 | 0.4 | - | 4.2 |
| M253()(M33)() | 0.6 | 1.6 | 0.0 | 6.0 | 0.5 | 1.2 | 0.0 | 5.9 | 0.4 | 1.0 | - | 7.3 |
| M254()(M34)() | 0.6 | 1.1 | 0.0 | 5.4 | 0.5 | 0.9 | 0.0 | 5.3 | 0.4 | 0.8 | - | 5.6 |
| M255()(M35)() | 0.5 | 1.0 | 0.0 | 5.2 | 0.5 | 0.8 | 0.0 | 5.1 | 0.3 | 0.7 | - | 5.2 |
| M256()(M36)() | 0.8 | 1.9 | 0.1 | 6.3 | 0.7 | 1.4 | 0.0 | 5.9 | 0.5 | 1.2 | - | 6.3 |
| M257()(M38)() | 0.7 | 1.1 | 0.0 | 5.3 | 0.6 | 0.9 | 0.0 | 5.2 | 0.4 | 0.8 | - | 5.2 |
| M258()(M39)() | 0.7 | 1.1 | 0.0 | 5.4 | 0.6 | 0.9 | 0.0 | 5.2 | 0.4 | 0.8 | - | 5.2 |
| M259()(M40)() | 0.7 | 1.1 | 0.0 | 5.4 | 0.6 | 0.9 | 0.0 | 5.2 | 0.5 | 0.8 | - | 5.2 |
| M260()(M41)() | 0.8 | 1.2 | 0.0 | 5.5 | 0.7 | 0.9 | 0.0 | 5.3 | 0.5 | 0.9 | - | 5.3 |
| M261()(M42)() | 0.8 | 1.2 | 0.1 | 5.5 | 0.7 | 1.0 | 0.0 | 5.3 | 0.5 | 0.9 | - | 5.3 |
| M262()(M43)() | 0.8 | 1.3 | 0.1 | 5.7 | 0.7 | 1.0 | 0.0 | 5.4 | 0.5 | 0.9 | - | 5.4 |
| M263()(M44)() | 0.9 | 1.2 | 0.1 | 5.6 | 0.7 | 1.0 | 0.0 | 5.4 | 0.5 | 0.9 | - | 5.3 |
| M264()(M45)() | 0.9 | 1.2 | 0.1 | 5.7 | 0.8 | 1.0 | 0.0 | 5.4 | 0.6 | 0.9 | - | 5.3 |
| M265()(M46)() | 1.1 | 2.9 | 0.1 | 7.4 | 0.9 | 2.0 | 0.0 | 6.5 | 0.7 | 1.7 | - | 6.5 |
| M266()(M47)() | 4.1 | **10.7** | 0.1 | **18.1** | 3.5 | 6.8 | 0.1 | **13.4** | 2.3 | **8.7** | - | **14.1** |
| M267()(M48)() | 3.2 | 5.0 | 0.1 | **11.5** | 3.4 | 4.9 | 0.1 | **11.5** | 2.6 | 7.1 | - | **12.8** |
| M268()(M49)() | 5.5 | 3.6 | 0.1 | **12.4** | 6.3 | 2.6 | 0.1 | **12.1** | 4.6 | 2.8 | - | **10.5** |
| M269()(M51)() | 2.3 | 0.9 | 0.2 | 6.4 | 3.0 | 0.9 | 0.1 | 7.0 | 3.2 | 1.3 | - | 7.5 |
| M270()(M52)() | 2.2 | 0.8 | 0.2 | 6.3 | 2.7 | 0.8 | 0.1 | 6.6 | 2.8 | 1.1 | - | 7.0 |
| M271()(M53)() | 1.7 | 0.7 | 0.1 | 5.6 | 1.7 | 0.6 | 0.1 | 5.5 | 1.5 | 1.0 | - | 5.5 |
| M272()(M54)() | 1.2 | 1.0 | 0.1 | 5.4 | 1.1 | 1.0 | 0.1 | 5.2 | 0.9 | 2.0 | - | 5.9 |
| M273()(M55)() | 1.0 | 1.3 | 0.1 | 5.4 | 0.8 | 1.3 | 0.1 | 5.2 | 0.8 | 2.2 | - | 6.0 |
| M274()(M56)() | 0.8 | 1.9 | 0.1 | 5.9 | 0.7 | 2.2 | 0.1 | 6.0 | 0.6 | 2.8 | - | 6.5 |
| M275()(M57)() | 0.6 | 2.6 | 0.1 | 6.5 | 0.5 | 3.0 | 0.0 | 6.8 | 0.5 | 5.2 | - | **8.9** |

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Advisory - 8µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| M276()(M58)() | 1.0 | 1.2 | 0.1 | 5.7 | 0.8 | 1.0 | 0.0 | 5.4 | 0.6 | 0.9 | - | 5.3 |
| M277()(M59)() | 1.0 | 1.2 | 0.1 | 5.7 | 0.8 | 1.0 | 0.0 | 5.4 | 0.6 | 0.9 | - | 5.2 |
| M278()(M61)() | 1.3 | 0.8 | 0.1 | 5.6 | 1.0 | 0.7 | 0.0 | 5.1 | 0.8 | 0.7 | - | 4.8 |
| M279()(M62)() | 1.4 | 0.8 | 0.1 | 5.6 | 1.1 | 0.7 | 0.0 | 5.1 | 0.8 | 0.7 | - | 4.9 |
| M280()(M63)() | 1.4 | 0.8 | 0.1 | 5.7 | 1.1 | 0.8 | 0.0 | 5.2 | 0.8 | 0.7 | - | 4.9 |
| M281()(M64)() | 1.5 | 0.9 | 0.1 | 5.8 | 1.2 | 0.8 | 0.0 | 5.2 | 0.9 | 0.7 | - | 5.0 |
| M282()(M65)() | 2.0 | 1.0 | 0.1 | 6.4 | 1.5 | 0.9 | 0.0 | 5.7 | 1.1 | 0.8 | - | 5.3 |
| M283()(M66)() | 2.3 | 1.0 | 0.1 | 6.8 | 1.7 | 0.9 | 0.0 | 5.9 | 1.2 | 0.9 | - | 5.4 |
| M284()(M67)() | 3.2 | 1.1 | 0.1 | 7.8 | 2.1 | 1.0 | 0.0 | 6.4 | 1.4 | 0.9 | - | 5.7 |
| M285()(M68)() | 3.2 | 1.2 | 0.1 | 7.9 | 2.2 | 1.0 | 0.0 | 6.5 | 1.4 | 1.0 | - | 5.8 |
| M286()(M69)() | 4.5 | 1.3 | 0.1 | **9.3** | 2.7 | 1.1 | 0.1 | 7.1 | 1.5 | 1.0 | - | 5.9 |
| M287()(M70)() | **9.7** | 1.4 | 0.1 | **14.5** | 4.0 | 1.1 | 0.1 | 8.4 | 1.9 | 1.1 | - | 6.3 |
| M288()(M71)() | **11.4** | 1.9 | 0.1 | **16.7** | 7.6 | 1.5 | 0.1 | **12.3** | 2.6 | 1.4 | - | 7.3 |
| M289()(M72)() | **15.7** | 2.1 | 0.1 | **21.2** | **13.3** | 1.7 | 0.1 | **18.2** | 4.5 | 1.5 | - | **9.3** |
| M290()(M73)() | **15.6** | 2.1 | 0.1 | **21.1** | **12.8** | 1.8 | 0.1 | **17.7** | 5.0 | 1.6 | - | **9.9** |
| M291()(M74)() | **18.4** | 2.0 | 0.1 | **23.7** | **14.2** | 1.6 | 0.1 | **19.0** | 7.1 | 1.5 | - | **11.8** |
| M292()(M75)() | **15.7** | 2.0 | 0.1 | **21.0** | **13.3** | 1.6 | 0.1 | **18.1** | **8.9** | 1.5 | - | **13.6** |
| M293()(M76)() | **52.6** | 1.4 | 0.1 | **57.4** | **34.9** | 1.2 | 0.1 | **39.2** | **18.7** | 1.1 | - | **23.1** |
| M294()(M77)() | **9.6** | 1.5 | 0.1 | **14.4** | **30.9** | 1.2 | 0.1 | **35.3** | **23.7** | 1.1 | - | **27.9** |
| M295()(M78)() | 6.5 | 1.4 | 0.1 | **11.2** | **33.0** | 1.2 | 0.1 | **37.3** | **29.7** | 1.2 | - | **34.0** |
| M296()(M79)() | 5.6 | 1.3 | 0.1 | **10.2** | **48.7** | 1.1 | 0.1 | **52.9** | **33.7** | 1.1 | - | **37.9** |
| M297()(M80)() | 4.5 | 1.2 | 0.1 | **9.0** | **12.8** | 1.1 | 0.1 | **17.0** | **16.2** | 1.2 | - | **20.5** |
| M298()(M81)() | 4.5 | 1.1 | 0.1 | **8.8** | **12.4** | 1.0 | 0.1 | **16.5** | **15.2** | 1.1 | - | **19.4** |
| M299()(M82)() | 2.7 | 1.0 | 0.1 | 7.0 | 3.9 | 1.0 | 0.1 | 8.0 | 4.5 | 1.2 | - | **8.7** |
| M300()(M83)() | 2.2 | 0.9 | 0.2 | 6.4 | 3.1 | 0.9 | 0.1 | 7.1 | 3.4 | 1.2 | - | 7.6 |
| M301()(M84)() | 1.1 | 0.5 | 0.2 | 4.8 | 1.7 | 0.5 | 0.2 | 5.3 | 2.0 | 0.6 | - | 5.5 |
| M302()(M85)() | 0.8 | 0.3 | 0.2 | 4.3 | 1.2 | 0.3 | 0.2 | 4.7 | 1.3 | 0.4 | - | 4.7 |
| M303()(M93)() | 1.4 | 0.3 | 0.2 | 5.0 | 1.6 | 0.3 | 0.2 | 5.0 | 1.7 | 0.4 | - | 5.1 |
| M304()(M95)() | 1.0 | 0.2 | 0.3 | 4.4 | 1.1 | 0.2 | 0.2 | 4.4 | 1.1 | 0.2 | - | 4.3 |
| P305()()(19) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P306()()(25) | 0.2 | 0.1 | 1.2 | 4.4 | 0.3 | 0.1 | 1.3 | 4.6 | 0.3 | 0.1 | - | 3.3 |
| P307()()(54) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| M308()()(56) | 0.2 | 0.0 | 3.0 | 6.3 | 0.3 | 0.1 | 1.6 | 4.9 | 0.3 | 0.1 | - | 3.3 |
| P309()()(79) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P310()()(81) | 0.3 | 0.1 | 1.2 | 4.5 | 0.3 | 0.1 | 0.4 | 3.7 | 0.3 | 0.1 | - | 3.3 |
| P311()()(83) | 0.2 | 0.0 | 1.1 | 4.2 | 0.3 | 0.0 | 3.5 | 6.7 | 0.3 | 0.1 | - | 3.2 |
| P312()()(109) | 0.2 | 0.0 | 0.7 | 3.8 | 0.2 | 0.0 | 0.5 | 3.7 | 0.2 | 0.0 | - | 3.1 |
| P313()()(110) | 0.2 | 0.0 | 1.0 | 4.2 | 0.3 | 0.1 | 0.5 | 3.7 | 0.3 | 0.1 | - | 3.2 |
| P314()()(114) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P315()()(121) | 0.2 | 0.0 | 0.3 | 3.4 | 0.2 | 0.0 | 0.3 | 3.5 | 0.2 | 0.1 | - | 3.2 |
| P316()()(124) | 0.2 | 0.1 | 0.3 | 3.5 | 0.2 | 0.1 | 0.2 | 3.4 | 0.2 | 0.1 | - | 3.2 |
| P317()()(128) | 0.3 | 0.1 | 0.1 | 3.5 | 0.3 | 0.1 | 0.1 | 3.4 | 0.3 | 0.1 | - | 3.4 |
| P318()()(130) | 0.2 | 0.0 | 1.2 | 4.4 | 0.2 | 0.0 | 0.7 | 3.9 | 0.3 | 0.1 | - | 3.2 |
| P319()()(135) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | - | 3.0 |
| P320()()(139) | 0.3 | 0.1 | 0.2 | 3.5 | 0.3 | 0.1 | 0.1 | 3.4 | 0.3 | 0.2 | - | 3.4 |
| P321()()(141) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Advisory - 8µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P322()()(144) | 0.3 | 0.1 | 0.2 | 3.5 | 0.3 | 0.1 | 0.1 | 3.4 | 0.3 | 0.1 | - | 3.3 |
| P323()()(147) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P324()()(126A) | 0.3 | 0.4 | 0.1 | 3.7 | 0.3 | 0.4 | 0.0 | 3.7 | 0.3 | 0.5 | - | 3.8 |
| P325()()(237) | 0.8 | 0.2 | 0.3 | 4.3 | 1.1 | 0.2 | 0.2 | 4.5 | 1.2 | 0.3 | - | 4.5 |
| | | | | | | | | | | | | |
| P327()()(148) | 0.2 | 0.0 | 1.1 | 4.3 | 0.2 | 0.0 | 0.6 | 3.8 | 0.3 | 0.1 | - | 3.2 |
| P328()()(151) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P329()()(156) | 0.2 | 0.1 | 0.2 | 3.3 | 0.2 | 0.1 | 0.1 | 3.3 | 0.2 | 0.1 | - | 3.2 |
| P330()()(157) | 0.3 | 0.1 | 0.1 | 3.5 | 0.3 | 0.1 | 0.1 | 3.4 | 0.3 | 0.2 | - | 3.4 |
| P331()()(164) | 0.1 | 0.0 | 0.2 | 3.3 | 0.2 | 0.0 | 0.2 | 3.3 | 0.2 | 0.0 | - | 3.1 |
| P332()()(165) | 0.2 | 0.1 | 0.2 | 3.4 | 0.3 | 0.1 | 0.1 | 3.4 | 0.3 | 0.1 | - | 3.3 |
| P333()()(166) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P334()()(170) | 0.3 | 0.1 | 0.1 | 3.5 | 0.3 | 0.1 | 0.1 | 3.4 | 0.3 | 0.2 | - | 3.4 |
| P335()()(171) | 0.3 | 0.1 | 0.1 | 3.5 | 0.3 | 0.1 | 0.1 | 3.4 | 0.3 | 0.2 | - | 3.4 |
| P336()()(172) | 0.2 | 0.1 | 0.2 | 3.4 | 0.3 | 0.1 | 0.1 | 3.4 | 0.3 | 0.1 | - | 3.3 |
| P337()()(176) | 0.1 | 0.0 | 0.2 | 3.3 | 0.2 | 0.0 | 0.3 | 3.4 | 0.2 | 0.0 | - | 3.1 |
| P338()()(177) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P339()()(178) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P340()()(184) | 0.1 | 0.1 | 0.2 | 3.3 | 0.2 | 0.1 | 0.2 | 3.4 | 0.2 | 0.1 | - | 3.2 |
| P341()()(185) | 0.2 | 0.1 | 0.2 | 3.4 | 0.2 | 0.1 | 0.2 | 3.5 | 0.2 | 0.1 | - | 3.2 |
| P342()()(187) | 0.2 | 0.1 | 0.2 | 3.4 | 0.2 | 0.1 | 0.2 | 3.5 | 0.2 | 0.1 | - | 3.2 |
| P343()()(189) | 0.2 | 0.1 | 0.3 | 3.4 | 0.3 | 0.1 | 0.3 | 3.6 | 0.2 | 0.1 | - | 3.3 |
| | | | | | | | | | | | | |
| P345()()(199) | 0.1 | 0.1 | 0.2 | 3.3 | 0.2 | 0.1 | 0.2 | 3.3 | 0.2 | 0.1 | - | 3.2 |
| P346()()(200) | 0.1 | 0.0 | 0.2 | 3.3 | 0.2 | 0.0 | 0.2 | 3.3 | 0.2 | 0.1 | - | 3.1 |
| P347()()(204) | 0.1 | 0.0 | 0.1 | 3.2 | 0.2 | 0.1 | 0.1 | 3.3 | 0.1 | 0.1 | - | 3.1 |
| P348()()(205) | 0.3 | 0.1 | 0.1 | 3.4 | 0.3 | 0.2 | 0.1 | 3.4 | 0.3 | 0.2 | - | 3.4 |
| P349()()(206) | 0.2 | 0.1 | 0.1 | 3.4 | 0.3 | 0.1 | 0.1 | 3.4 | 0.3 | 0.2 | - | 3.3 |
| P350()()(207) | 0.2 | 0.1 | 0.1 | 3.3 | 0.2 | 0.1 | 0.0 | 3.3 | 0.2 | 0.1 | - | 3.3 |
| P351()()(208) | 0.2 | 0.1 | 0.1 | 3.3 | 0.2 | 0.1 | 0.1 | 3.2 | 0.2 | 0.1 | - | 3.2 |
| P352()()(209) | 0.1 | 0.0 | 0.2 | 3.3 | 0.1 | 0.0 | 0.3 | 3.4 | 0.2 | 0.0 | - | 3.1 |
| P353()()(210) | 0.1 | 0.0 | 0.0 | 3.0 | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | - | 3.0 |
| P354()()(211) | 0.1 | 0.0 | 0.0 | 3.0 | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | - | 3.0 |
| P355()()(212B) | 0.1 | 0.0 | 0.0 | 3.0 | 0.1 | 0.0 | 0.0 | 3.0 | 0.1 | 0.0 | - | 3.0 |
| P356()()(213) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P357()()(214) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | - | 3.1 |
| P358()()(215) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P359()()(216) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P360()()(217) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P361()()(218) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.1 | - | 3.1 |
| P362()()(219) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.1 | - | 3.1 |
| P363()()(220) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.1 | - | 3.1 |
| P364()()(222) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.1 | - | 3.1 |
| P365()()(223) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.1 | - | 3.1 |
| P366()()(254A) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | - | 3.0 |
| P367()()(253) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Advisory - 8µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P368()()(255) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.0 |
| P369()()(256) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.2 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P370()()(258) | 0.2 | 0.1 | 0.1 | 3.4 | 0.2 | 0.1 | 0.1 | 3.3 | 0.2 | 0.1 | - | 3.3 |
| P371()()(259) | 0.2 | 0.1 | 0.1 | 3.4 | 0.3 | 0.1 | 0.1 | 3.4 | 0.2 | 0.2 | - | 3.3 |
| P372()()(260) | 0.2 | 0.1 | 0.1 | 3.4 | 0.2 | 0.1 | 0.1 | 3.4 | 0.2 | 0.2 | - | 3.3 |
| P373()()(261) | 0.2 | 0.1 | 0.1 | 3.4 | 0.2 | 0.2 | 0.0 | 3.4 | 0.2 | 0.2 | - | 3.3 |
| P374()()(263) | 0.3 | 0.1 | 0.1 | 3.4 | 0.3 | 0.2 | 0.0 | 3.4 | 0.3 | 0.2 | - | 3.4 |
| P375()()(264) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P376()()(265) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | - | 3.0 |
| P377()()(266) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | - | 3.0 |
| P378()()(270) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P379()()(283) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P380()()(285) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P381()()(286) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P382()()(287) | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P383()()(288) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P384()()(290) | 0.1 | 0.0 | 0.2 | 3.2 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P385()()(291) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P386()()(292) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P387()()(293) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P388()()(294) | 0.1 | 0.0 | 0.1 | 3.2 | 0.2 | 0.0 | 0.2 | 3.3 | 0.2 | 0.1 | - | 3.1 |
| P389()()(106A) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P390()()(106B) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P391()()(112A) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P392()()(112B) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P393()()(112C) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | - | 3.1 |
| P394()()(112D) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | - | 3.1 |
| P395()()(132B) | 0.2 | 0.1 | 0.5 | 3.7 | 0.4 | 0.1 | 0.5 | 3.9 | 0.3 | 0.1 | - | 3.4 |
| P396()()(134A) | 0.2 | 0.0 | 0.6 | 3.8 | 0.2 | 0.1 | 0.3 | 3.5 | 0.2 | 0.1 | - | 3.2 |
| P397()()(134B) | 0.2 | 0.0 | 0.6 | 3.8 | 0.2 | 0.1 | 0.3 | 3.5 | 0.2 | 0.1 | - | 3.2 |
| P398()()(134C) | 0.2 | 0.0 | 0.5 | 3.7 | 0.2 | 0.1 | 0.3 | 3.5 | 0.2 | 0.1 | - | 3.2 |
| P399()()(134D) | 0.2 | 0.1 | 0.3 | 3.4 | 0.2 | 0.1 | 0.2 | 3.3 | 0.2 | 0.1 | - | 3.2 |
| P400()()(173B) | 0.3 | 0.4 | 0.1 | 3.7 | 0.3 | 0.4 | 0.0 | 3.7 | 0.3 | 0.5 | - | 3.8 |
| P401()()(201A) | 0.2 | 0.1 | 0.2 | 3.4 | 0.3 | 0.1 | 0.2 | 3.5 | 0.2 | 0.1 | - | 3.3 |
| P402()()(201B) | 0.2 | 0.1 | 0.2 | 3.4 | 0.3 | 0.1 | 0.2 | 3.5 | 0.2 | 0.1 | - | 3.3 |
| P403()()(201C) | 0.2 | 0.1 | 0.2 | 3.4 | 0.3 | 0.1 | 0.2 | 3.5 | 0.2 | 0.1 | - | 3.3 |
| P404()()(21B) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | - | 3.0 |
| P405()()(284A) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P406()()(284B) | 0.1 | 0.0 | 0.1 | 3.1 | 0.1 | 0.0 | 0.1 | 3.2 | 0.1 | 0.0 | - | 3.1 |
| P407()()(96B) | 0.7 | 0.3 | 0.1 | 4.2 | 0.7 | 0.3 | 0.1 | 4.1 | 0.7 | 0.4 | - | 4.0 |
| P408()()(168) | 0.7 | 0.3 | 0.1 | 4.2 | 0.7 | 0.3 | 0.1 | 4.1 | 0.7 | 0.4 | - | 4.0 |
| P409()()(125D) | 0.4 | 0.1 | 0.7 | 4.2 | 0.6 | 0.1 | 0.6 | 4.2 | 0.6 | 0.1 | - | 3.7 |
| P410()()(125E) | 0.4 | 0.1 | 0.7 | 4.1 | 0.6 | 0.1 | 0.6 | 4.2 | 0.6 | 0.1 | - | 3.7 |
| P411()()(125F) | 0.4 | 0.1 | 0.7 | 4.2 | 0.6 | 0.1 | 0.6 | 4.2 | 0.6 | 0.1 | - | 3.7 |
| P412()()(309) | 0.4 | 0.3 | 0.1 | 3.8 | 0.4 | 0.3 | 0.1 | 3.7 | 0.4 | 0.4 | - | 3.7 |
| | | | | | | | | | | | | |

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Advisory - 8µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| M414()()(2) | 0.3 | 0.0 | 4.4 | 7.7 | 0.3 | 0.1 | 3.4 | 6.7 | 0.3 | 0.1 | - | 3.3 |
| M415()()(9) | 0.6 | 0.1 | 1.7 | 5.3 | 0.7 | 0.1 | 1.0 | 4.7 | 0.7 | 0.1 | - | 3.8 |
| M416()()(10) | 0.6 | 0.2 | 0.2 | 3.9 | 0.6 | 0.2 | 0.1 | 3.8 | 0.6 | 0.2 | - | 3.7 |
| M417()()(11) | 0.5 | 0.1 | 0.5 | 4.0 | 0.5 | 0.1 | 0.2 | 3.8 | 0.6 | 0.1 | - | 3.6 |
| M418()()(16) | 0.6 | 0.1 | 0.7 | 4.4 | 0.7 | 0.1 | 0.3 | 4.1 | 0.8 | 0.1 | - | 3.8 |
| M419()()(26) | 0.5 | 0.2 | 0.2 | 3.8 | 0.5 | 0.2 | 0.1 | 3.7 | 0.5 | 0.2 | - | 3.6 |
| M420()()(28) | 0.2 | 0.0 | 1.2 | 4.4 | 0.3 | 0.0 | 2.4 | 5.6 | 0.3 | 0.1 | - | 3.2 |
| M421()()(30) | 0.2 | 0.0 | 0.3 | 3.5 | 0.2 | 0.1 | 0.4 | 3.6 | 0.2 | 0.1 | - | 3.2 |
| M422()()(31) | 0.5 | 0.1 | 0.4 | 4.0 | 0.5 | 0.1 | 0.2 | 3.7 | 0.5 | 0.1 | - | 3.6 |
| M423()()(37) | 0.2 | 0.0 | 0.3 | 3.5 | 0.2 | 0.1 | 0.4 | 3.6 | 0.2 | 0.1 | - | 3.2 |
| M424()()(38) | 0.6 | 0.1 | 1.2 | 4.9 | 0.8 | 0.1 | 0.8 | 4.6 | 0.8 | 0.1 | - | 3.9 |
| M425()()(39) | 0.3 | 0.1 | 0.2 | 3.5 | 0.3 | 0.1 | 0.1 | 3.5 | 0.3 | 0.2 | - | 3.4 |
| M426()()(40) | 0.5 | 0.2 | 0.1 | 3.8 | 0.5 | 0.2 | 0.1 | 3.7 | 0.5 | 0.3 | - | 3.7 |
| M427()()(44) | 0.3 | 0.1 | 1.8 | 5.1 | 0.4 | 0.1 | 0.4 | 3.8 | 0.4 | 0.1 | - | 3.4 |
| M428()()(48) | 0.8 | 0.1 | 0.5 | 4.4 | 0.9 | 0.1 | 0.3 | 4.3 | 1.0 | 0.2 | - | 4.1 |
| M429()()(49) | 0.3 | 0.1 | 2.0 | 5.3 | 0.4 | 0.1 | 0.4 | 3.7 | 0.4 | 0.1 | - | 3.4 |
| M430()()(51) | 0.2 | 0.0 | 2.4 | 5.6 | 0.3 | 0.0 | 1.9 | 5.2 | 0.3 | 0.1 | - | 3.3 |
| M431()()(55) | 0.5 | 0.2 | 0.2 | 3.9 | 0.6 | 0.2 | 0.1 | 3.8 | 0.5 | 0.2 | - | 3.7 |
| M432()()(57) | 0.2 | 0.0 | 0.4 | 3.5 | 0.2 | 0.0 | 0.8 | 3.9 | 0.2 | 0.0 | - | 3.2 |
| M433()()(60) | 0.3 | 0.1 | 2.0 | 5.3 | 0.4 | 0.1 | 0.4 | 3.8 | 0.4 | 0.1 | - | 3.4 |
| M434()()(64) | 0.5 | 0.1 | 0.3 | 3.9 | 0.5 | 0.1 | 0.1 | 3.7 | 0.5 | 0.2 | - | 3.6 |
| M435()()(69) | 0.6 | 0.1 | 1.3 | 5.0 | 0.7 | 0.1 | 0.8 | 4.6 | 0.8 | 0.1 | - | 3.9 |
| M436()()(71) | 0.4 | 0.2 | 0.1 | 3.6 | 0.4 | 0.2 | 0.1 | 3.6 | 0.4 | 0.2 | - | 3.5 |
| M437()()(72) | 0.2 | 0.0 | 2.5 | 5.7 | 0.3 | 0.0 | 1.3 | 4.6 | 0.3 | 0.1 | - | 3.3 |
| M438()()(77) | 0.6 | 0.1 | 0.9 | 4.6 | 0.7 | 0.1 | 0.4 | 4.2 | 0.8 | 0.1 | - | 3.9 |
| M439()()(80) | 0.3 | 0.1 | 1.4 | 4.7 | 0.3 | 0.1 | 0.4 | 3.7 | 0.4 | 0.1 | - | 3.4 |
| M440()()(82) | 0.3 | 0.1 | 7.7 | **11.0** | 0.4 | 0.1 | 1.0 | 4.3 | 0.4 | 0.1 | - | 3.4 |
| M441()()(84) | 0.4 | 0.1 | 1.0 | 4.4 | 0.4 | 0.1 | 0.3 | 3.7 | 0.5 | 0.1 | - | 3.5 |
| M442()()(85) | 0.5 | 0.1 | 0.3 | 3.9 | 0.5 | 0.1 | 0.1 | 3.7 | 0.5 | 0.2 | - | 3.7 |
| M443()()(88) | 0.4 | 0.1 | 0.4 | 3.8 | 0.4 | 0.1 | 0.1 | 3.6 | 0.5 | 0.1 | - | 3.5 |
| M444()()(90) | 0.3 | 0.1 | 0.9 | 4.3 | 0.4 | 0.1 | 0.2 | 3.6 | 0.4 | 0.1 | - | 3.5 |
| M445()()(91) | 0.3 | 0.1 | 1.5 | 4.8 | 0.3 | 0.1 | 0.5 | 3.8 | 0.3 | 0.1 | - | 3.3 |
| M446()()(92) | 0.3 | 0.1 | 1.7 | 5.0 | 0.3 | 0.1 | 0.4 | 3.8 | 0.4 | 0.1 | - | 3.4 |
| M447()()(95) | 0.3 | 0.1 | 0.4 | 3.7 | 0.3 | 0.1 | 0.2 | 3.5 | 0.3 | 0.1 | - | 3.4 |
| M448()()(101) | 0.3 | 0.1 | 0.3 | 3.7 | 0.4 | 0.1 | 0.1 | 3.5 | 0.4 | 0.1 | - | 3.5 |
| M449()()(103) | 0.1 | 0.0 | 0.2 | 3.2 | 0.1 | 0.0 | 0.2 | 3.3 | 0.1 | 0.0 | - | 3.1 |
| M450()()(105) | 0.4 | 0.1 | 1.0 | 4.4 | 0.6 | 0.1 | 0.8 | 4.4 | 0.6 | 0.1 | - | 3.6 |
| M451()()(108) | 0.2 | 0.0 | 0.9 | 4.1 | 0.2 | 0.0 | 1.4 | 4.6 | 0.2 | 0.0 | - | 3.2 |
| M452()()(115) | 0.2 | 0.1 | 0.4 | 3.6 | 0.3 | 0.1 | 0.5 | 3.8 | 0.3 | 0.1 | - | 3.3 |
| M453()()(118) | 0.5 | 0.2 | 0.1 | 3.9 | 0.5 | 0.2 | 0.1 | 3.8 | 0.5 | 0.3 | - | 3.8 |
| M454()()(133) | 0.2 | 0.1 | 0.3 | 3.5 | 0.3 | 0.1 | 0.4 | 3.6 | 0.2 | 0.1 | - | 3.2 |
| M455()()(137) | 0.3 | 0.1 | 0.5 | 3.9 | 0.4 | 0.1 | 0.6 | 4.0 | 0.4 | 0.1 | - | 3.4 |
| M456()()(138) | 0.2 | 0.0 | 1.5 | 4.7 | 0.3 | 0.0 | 1.2 | 4.4 | 0.3 | 0.1 | - | 3.2 |
| M457()()(140) | 0.2 | 0.0 | 0.3 | 3.4 | 0.2 | 0.1 | 0.3 | 3.5 | 0.2 | 0.1 | - | 3.2 |
| M458()()(167) | 0.5 | 0.2 | 0.1 | 3.9 | 0.5 | 0.2 | 0.1 | 3.8 | 0.5 | 0.3 | - | 3.7 |
| M459()()(169) | 0.3 | 0.1 | 0.5 | 3.8 | 0.4 | 0.1 | 0.5 | 3.9 | 0.4 | 0.1 | - | 3.4 |

| Receptor ID | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Advisory - 8µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| M460()()(179) | 0.1 | 0.0 | 0.2 | 3.3 | 0.2 | 0.0 | 0.2 | 3.4 | 0.2 | 0.1 | - | 3.2 |
| M461()()(180) | 0.2 | 0.1 | 1.2 | 4.4 | 0.3 | 0.1 | 0.5 | 3.8 | 0.3 | 0.1 | - | 3.3 |
| M462()()(262) | 0.2 | 0.1 | 0.1 | 3.4 | 0.2 | 0.2 | 0.0 | 3.4 | 0.2 | 0.2 | - | 3.4 |
| M463()()(269) | 0.1 | 0.0 | 0.2 | 3.3 | 0.2 | 0.0 | 0.2 | 3.4 | 0.2 | 0.1 | - | 3.2 |
| M464()()(289) | 0.3 | 0.2 | 0.1 | 3.5 | 0.3 | 0.2 | 0.0 | 3.5 | 0.3 | 0.3 | - | 3.5 |
| M465()()(15B) | 0.3 | 0.1 | 1.5 | 4.8 | 0.5 | 0.1 | 1.4 | 4.8 | 0.5 | 0.1 | - | 3.5 |
| M466()()(269A) | 0.1 | 0.0 | 0.2 | 3.3 | 0.2 | 0.0 | 0.2 | 3.3 | 0.2 | 0.1 | - | 3.1 |
| M467()()(269B) | 0.1 | 0.0 | 0.2 | 3.3 | 0.2 | 0.0 | 0.2 | 3.3 | 0.2 | 0.1 | - | 3.1 |
| M468()()(33A) | 0.3 | 0.1 | 0.8 | 4.1 | 0.3 | 0.1 | 0.3 | 3.6 | 0.4 | 0.1 | - | 3.4 |
| M469()()(33B) | 0.3 | 0.1 | 1.2 | 4.5 | 0.4 | 0.1 | 0.3 | 3.6 | 0.4 | 0.1 | - | 3.4 |
| M470()()(33C) | 0.4 | 0.1 | 1.2 | 4.6 | 0.4 | 0.1 | 0.3 | 3.7 | 0.4 | 0.1 | - | 3.5 |
| M471()()(33E) | 0.3 | 0.1 | 5.9 | **9.2** | 0.4 | 0.1 | 0.6 | 3.9 | 0.4 | 0.1 | - | 3.4 |
| M472()()(33F) | 0.2 | 0.1 | 0.4 | 3.6 | 0.3 | 0.1 | 0.5 | 3.8 | 0.3 | 0.1 | - | 3.3 |
| M473()()(33G) | 0.5 | 0.1 | 1.3 | 4.9 | 0.6 | 0.1 | 0.5 | 4.1 | 0.6 | 0.1 | - | 3.7 |
| M474()()(33H) | 0.2 | 0.0 | 1.8 | 5.0 | 0.3 | 0.0 | **10.8** | **14.1** | 0.3 | 0.1 | - | 3.3 |
| M475()()(33I) | 0.3 | 0.1 | 1.3 | 4.6 | 0.3 | 0.1 | 0.5 | 3.8 | 0.3 | 0.1 | - | 3.3 |
| M476()()(33K) | 0.2 | 0.0 | 2.5 | 5.8 | 0.3 | 0.0 | 2.1 | 5.3 | 0.3 | 0.1 | - | 3.3 |
| M477()()(33M) | 0.2 | 0.1 | 0.3 | 3.4 | 0.2 | 0.1 | 0.3 | 3.5 | 0.2 | 0.1 | - | 3.2 |
| M478()()(45A) | 0.2 | 0.1 | 1.8 | 5.1 | 0.3 | 0.1 | 0.7 | 4.0 | 0.3 | 0.1 | - | 3.3 |
| M479()()(45B) | 0.2 | 0.0 | 1.4 | 4.6 | 0.3 | 0.0 | 0.9 | 4.2 | 0.3 | 0.1 | - | 3.2 |
| M480()()(59B) | 0.2 | 0.0 | 0.7 | 3.8 | 0.2 | 0.0 | 1.5 | 4.7 | 0.2 | 0.0 | - | 3.2 |
| M481()()(75A) | 0.5 | 0.2 | 0.1 | 3.9 | 0.5 | 0.3 | 0.1 | 3.8 | 0.5 | 0.3 | - | 3.8 |
| M482()()(87A) | 0.2 | 0.1 | 1.3 | 4.5 | 0.3 | 0.1 | 0.6 | 3.8 | 0.3 | 0.1 | - | 3.3 |
| M483()()(87B) | 0.2 | 0.1 | 1.2 | 4.4 | 0.3 | 0.1 | 0.5 | 3.8 | 0.3 | 0.1 | - | 3.3 |
| M484()()(96A) | 0.7 | 0.3 | 0.2 | 4.1 | 0.7 | 0.3 | 0.1 | 4.0 | 0.7 | 0.4 | - | 4.0 |
| P485()()(66) | 0.3 | 0.2 | 0.1 | 3.5 | 0.3 | 0.2 | 0.0 | 3.5 | 0.3 | 0.3 | - | 3.5 |

**Table C-2: Modelling predictions for annual average $PM_{10}$ levels (µg/m³)**

| Receptor ID<br>P = Private<br>M =Mine owned<br>Respectively<br>(MAC)(Ben)(Man) | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Air quality criteria - 30µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P1(6)(66)() | 8.6 | 6.1 | 0.4 | 26.4 | 7.0 | 5.4 | 0.3 | 23.1 | 5.3 | 5.1 | - | 21.4 |
| M2(8)(64)() | 7.3 | 6.2 | 0.4 | 25.2 | 6.0 | 5.4 | 0.3 | 22.4 | 4.4 | 5.1 | - | 21.0 |
| M3(29)(44)() | 4.5 | 7.2 | 0.3 | 24.3 | 3.8 | 5.9 | 0.3 | 23.0 | 2.9 | 5.5 | - | 23.0 |
| P4(49a)(87N)() | 6.8 | 4.8 | 0.4 | 23.0 | 5.6 | 4.3 | 0.3 | 20.3 | 4.4 | 4.2 | - | 19.3 |
| P5(49b)(87S)() | 7.3 | 4.8 | 0.4 | 23.6 | 6.1 | 4.4 | 0.3 | 20.7 | 4.8 | 4.2 | - | 19.6 |
| P6(28)(43)() | 4.6 | 7.5 | 0.3 | 24.7 | 3.9 | 6.0 | 0.3 | 23.4 | 3.0 | 5.6 | - | 23.4 |
| P7(20)(53)() | 4.5 | 6.2 | 0.3 | 22.8 | 3.8 | 5.2 | 0.3 | 21.5 | 2.8 | 4.9 | - | 21.2 |
| P8(21)(57)() | 4.5 | 6.2 | 0.3 | 22.8 | 3.8 | 5.2 | 0.3 | 21.4 | 2.9 | 4.9 | - | 21.1 |
| P9(22)(59)() | 4.6 | 6.3 | 0.3 | 23.0 | 3.9 | 5.2 | 0.3 | 21.5 | 2.9 | 4.9 | - | 21.2 |
| P10(23)(60)() | 4.7 | 6.2 | 0.3 | 23.0 | 3.9 | 5.2 | 0.3 | 21.5 | 2.9 | 4.9 | - | 21.1 |
| P11(24)(58)() | 4.6 | 6.4 | 0.3 | 23.1 | 3.9 | 5.3 | 0.3 | 21.7 | 2.9 | 5.0 | - | 21.4 |
| P12(25)(51)() | 4.5 | 6.4 | 0.3 | 23.1 | 3.8 | 5.3 | 0.3 | 21.7 | 2.9 | 5.0 | - | 21.4 |
| P13(26)(52)() | 4.5 | 6.4 | 0.3 | 23.2 | 3.8 | 5.3 | 0.3 | 21.8 | 2.9 | 5.0 | - | 21.6 |
| P14(18)(55)() | 4.3 | 6.2 | 0.3 | 22.8 | 3.7 | 5.2 | 0.2 | 21.4 | 2.8 | 4.9 | - | 21.2 |
| P15(17)(50)() | 4.3 | 6.2 | 0.3 | 22.7 | 3.6 | 5.2 | 0.2 | 21.4 | 2.7 | 4.9 | - | 21.2 |
| P16(16)(48)() | 4.3 | 6.3 | 0.3 | 23.0 | 3.6 | 5.3 | 0.2 | 21.7 | 2.8 | 5.0 | - | 21.5 |
| P17(15)(47)() | 4.4 | 6.4 | 0.3 | 23.1 | 3.7 | 5.3 | 0.2 | 21.8 | 2.8 | 5.0 | - | 21.6 |
| P18(14)(49)() | 4.4 | 6.5 | 0.3 | 23.2 | 3.7 | 5.4 | 0.2 | 21.9 | 2.8 | 5.0 | - | 21.8 |
| P19(13)(62)() | 4.1 | 5.2 | 0.3 | 20.9 | 3.4 | 4.5 | 0.2 | 19.6 | 2.6 | 4.3 | - | 19.4 |
| P20(12)(61)() | 4.3 | 5.3 | 0.3 | 21.1 | 3.6 | 4.5 | 0.2 | 19.6 | 2.7 | 4.3 | - | 19.3 |
| P21(11)(46)() | 4.6 | 5.3 | 0.3 | 21.4 | 3.9 | 4.6 | 0.3 | 19.8 | 2.9 | 4.3 | - | 19.3 |
| M22(9)(M60)() | 7.4 | 8.9 | 0.4 | 28.5 | 6.2 | 7.4 | 0.3 | 25.9 | 4.5 | 6.7 | - | 25.0 |
| P23(10)(45)() | 7.0 | 8.1 | 0.4 | 27.1 | 5.8 | 6.7 | 0.3 | 24.7 | 4.2 | 6.2 | - | 23.7 |
| P24(30)(41)() | 4.2 | 6.5 | 0.3 | 23.1 | 3.6 | 5.4 | 0.2 | 21.9 | 2.7 | 5.0 | - | 21.8 |
| P25(31)(29)() | 3.5 | 6.4 | 0.3 | 23.1 | 3.0 | 5.3 | 0.2 | 22.5 | 2.3 | 4.9 | - | 23.1 |
| P26(32)(42)() | 4.2 | 6.3 | 0.3 | 22.8 | 3.5 | 5.2 | 0.2 | 21.6 | 2.7 | 4.9 | - | 21.5 |
| P27(33)(40)() | 3.7 | 5.7 | 0.3 | 21.6 | 3.2 | 4.8 | 0.2 | 20.6 | 2.4 | 4.5 | - | 20.7 |
| P28(36)(27E)() | 1.8 | 3.9 | 0.2 | 19.4 | 1.6 | 3.2 | 0.2 | 19.9 | 1.3 | 3.1 | - | 20.4 |
| P29(210)(118)() | 13.1 | 5.0 | 1.3 | 27.9 | 18.0 | 5.0 | 1.0 | **32.2** | 20.6 | 6.8 | - | **35.7** |
| P30(211)(119)() | 10.9 | 4.3 | 1.3 | 24.9 | 16.0 | 4.4 | 1.1 | 29.6 | 18.8 | 5.5 | - | **32.6** |
| M31(208)(M89)() | 9.8 | 3.6 | 1.4 | 23.3 | 14.0 | 3.6 | 1.2 | 26.8 | 16.1 | 4.8 | - | 29.1 |
| M32(207)(M88)() | 7.9 | 2.9 | 1.5 | 20.6 | 11.6 | 2.9 | 1.3 | 23.8 | 13.4 | 3.8 | - | 25.3 |
| P33(206)(114)() | 7.8 | 2.8 | 1.6 | 20.4 | 11.5 | 2.8 | 1.3 | 23.5 | 13.1 | 3.6 | - | 24.9 |
| P34(204)(113)() | 6.8 | 2.4 | 1.6 | 19.1 | 10.1 | 2.4 | 1.4 | 21.9 | 11.5 | 3.1 | - | 22.6 |
| P35(203)(112S)() | 6.0 | 2.1 | 1.7 | 18.1 | 9.2 | 2.1 | 1.5 | 20.7 | 10.2 | 2.7 | - | 21.0 |
| P36(197)(107)() | 3.9 | 1.2 | 2.4 | 15.5 | 6.0 | 1.2 | 2.1 | 17.2 | 6.2 | 1.5 | - | 15.6 |
| P37(196)(103)() | 3.9 | 1.1 | 2.5 | 15.5 | 5.9 | 1.1 | 2.2 | 17.1 | 6.1 | 1.4 | - | 15.4 |
| P38(187)(106)() | 5.0 | 1.7 | 1.9 | 16.7 | 7.7 | 1.7 | 1.7 | 19.0 | 8.2 | 2.1 | - | 18.3 |
| M39(184b)(M86)() | 5.9 | 2.2 | 1.7 | 17.9 | 9.2 | 2.2 | 1.5 | 20.8 | 10.2 | 2.8 | - | 21.0 |
| M40(199)(M91)() | 5.5 | 1.5 | 2.1 | 17.3 | 8.0 | 1.5 | 1.8 | 19.1 | 8.9 | 1.9 | - | 18.8 |
| M41(202)(M90)() | 7.1 | 2.1 | 1.8 | 19.3 | 10.1 | 2.0 | 1.5 | 21.5 | 11.5 | 2.6 | - | 22.1 |
| M42(212)(M50)() | 18.8 | 8.1 | 1.2 | **37.0** | 25.6 | 8.0 | 0.9 | **42.7** | 26.9 | 11.7 | - | **47.1** |
| P43(226)(120)() | 10.3 | 2.5 | 1.7 | 22.9 | 13.3 | 2.4 | 1.3 | 25.0 | 15.2 | 3.2 | - | 26.5 |
| M44(236)(M96)() | 7.7 | 1.5 | 1.8 | 19.4 | 8.2 | 1.5 | 1.1 | 18.7 | 8.1 | 2.0 | - | 18.1 |
| P45(264)(168)() | 4.4 | 17.3 | 0.5 | **31.9** | 3.9 | 20.4 | 0.3 | **34.1** | 3.6 | 28.7 | - | **41.5** |
| P46(182)(92)(191) | 2.4 | 0.8 | 2.4 | 13.5 | 4.0 | 0.8 | 2.4 | 15.1 | 3.5 | 1.0 | - | 12.3 |

| Receptor ID<br>P = Private<br>M =Mine owned<br>Respectively<br>(MAC)(Ben)(Man) | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Air quality criteria - 30µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P47(183)()(194) | 3.6 | 1.2 | 1.6 | 14.3 | 6.2 | 1.2 | 1.5 | 16.8 | 5.4 | 1.5 | - | 14.8 |
| P48(186)(105)(228) | 3.8 | 1.2 | 2.3 | 15.3 | 6.0 | 1.2 | 2.0 | 17.0 | 6.0 | 1.5 | - | 15.5 |
| P49(190)(93)(104) | 2.3 | 0.7 | 2.9 | 13.7 | 3.8 | 0.7 | 2.9 | 15.2 | 3.3 | 0.9 | - | 12.0 |
| P50(191)(98)(192) | 2.5 | 0.8 | 2.6 | 13.7 | 4.1 | 0.8 | 2.6 | 15.2 | 3.6 | 1.0 | - | 12.4 |
| P51(195)(102)(227) | 3.3 | 1.0 | 2.6 | 14.9 | 5.2 | 1.0 | 2.3 | 16.4 | 5.1 | 1.3 | - | 14.3 |
| P52(198)()(230) | 4.9 | 1.6 | 2.0 | 16.6 | 7.5 | 1.6 | 1.7 | 18.7 | 8.0 | 2.0 | - | 18.0 |
| P53(201)()(231) | 5.2 | 1.7 | 1.9 | 17.0 | 7.9 | 1.7 | 1.7 | 19.2 | 8.6 | 2.2 | - | 18.8 |
| M54(205)(M87)(233) | 6.4 | 2.3 | 1.7 | 18.6 | 9.7 | 2.3 | 1.4 | 21.4 | 10.9 | 2.9 | - | 21.9 |
| P55(209)(117)(275) | 8.4 | 3.3 | 1.4 | 21.5 | 12.6 | 3.4 | 1.2 | 25.2 | 14.6 | 4.4 | - | 27.2 |
| P56(200)(110N)(238) | 6.6 | 1.9 | 1.9 | 18.6 | 9.3 | 1.8 | 1.5 | 20.6 | 10.6 | 2.3 | - | 20.9 |
| P57(213a)(133N)(125A) | 4.3 | 1.0 | 3.3 | 16.6 | 6.1 | 0.9 | 2.7 | 17.6 | 6.7 | 1.2 | - | 15.8 |
| P58(213b)(133W)(125B) | 4.6 | 1.0 | 3.3 | 17.0 | 6.5 | 1.0 | 2.6 | 17.9 | 7.2 | 1.2 | - | 16.4 |
| P59(213c)(133S)(125C) | 4.3 | 0.9 | 3.4 | 16.7 | 6.1 | 0.9 | 2.7 | 17.6 | 6.7 | 1.2 | - | 15.7 |
| P60(216)(130)(240) | 4.5 | 1.1 | 2.8 | 16.5 | 6.5 | 1.1 | 2.3 | 17.7 | 7.1 | 1.3 | - | 16.3 |
| P61(218a)(126W)(241B) | 5.7 | 1.2 | 2.8 | 17.9 | 8.0 | 1.2 | 2.1 | 19.2 | 8.9 | 1.5 | - | 18.4 |
| P62(218b)(126N)(241C) | 6.3 | 1.3 | 2.7 | 18.5 | 8.5 | 1.3 | 2.1 | 19.7 | 9.5 | 1.6 | - | 19.1 |
| P63(218c)(126S)(241A) | 5.2 | 1.2 | 2.9 | 17.3 | 7.3 | 1.1 | 2.3 | 18.5 | 8.1 | 1.4 | - | 17.4 |
| P64(231)(145)(182A) | 6.3 | 1.2 | 3.0 | 18.7 | 8.4 | 1.2 | 2.2 | 19.6 | 9.4 | 1.5 | - | 18.9 |
| P65(232)(146)(182B) | 6.5 | 1.3 | 2.8 | 18.8 | 8.7 | 1.2 | 2.1 | 19.9 | 9.8 | 1.6 | - | 19.3 |
| P66(233a)(149W)(310) | 8.9 | 1.5 | 2.2 | 21.1 | 10.5 | 1.4 | 1.5 | 21.3 | 11.6 | 1.9 | - | 21.5 |
| P67(233b)(149S)(311) | 8.8 | 1.5 | 2.3 | 21.1 | 10.7 | 1.5 | 1.6 | 21.6 | 12.0 | 1.9 | - | 21.9 |
| P68(235)()(198) | 7.5 | 1.4 | 2.0 | 19.3 | 8.2 | 1.3 | 1.2 | 18.7 | 8.4 | 1.8 | - | 18.1 |
| P69(238)(152)(195) | 10.8 | 3.6 | 1.1 | 24.5 | 11.0 | 3.5 | 0.7 | 23.4 | 9.6 | 5.4 | - | 23.4 |
| P70(239)(153)(243) | 11.4 | 2.8 | 1.4 | 24.3 | 12.2 | 2.6 | 0.9 | 23.8 | 11.2 | 3.7 | - | 23.2 |
| P71(240)(154)(244) | 11.4 | 3.6 | 1.2 | 25.0 | 11.7 | 3.4 | 0.8 | 24.1 | 10.3 | 5.2 | - | 23.8 |
| P72(241)(155)(295) | 11.7 | 4.3 | 1.1 | 26.0 | 11.7 | 4.1 | 0.7 | 24.8 | 10.1 | 6.7 | - | 25.2 |
| P73(242a)(156E)(312) | 10.2 | 4.1 | 1.1 | 24.3 | 10.0 | 4.0 | 0.7 | 23.0 | 8.8 | 6.8 | - | 23.9 |
| P74(242b)(156W)(313) | 9.0 | 3.6 | 1.1 | 22.4 | 8.8 | 3.6 | 0.7 | 21.3 | 7.8 | 5.9 | - | 21.9 |
| P75(243)(192)(314) | 7.0 | 1.8 | 1.3 | 18.5 | 7.2 | 1.8 | 0.8 | 17.7 | 6.7 | 2.5 | - | 17.2 |
| M76(250)(M94)(202) | 8.1 | 7.2 | 0.8 | 25.2 | 7.2 | 7.3 | 0.5 | 23.5 | 6.4 | 13.5 | - | 28.4 |
| P77(252)(166)(246) | 5.4 | 9.4 | 0.6 | 24.4 | 4.8 | 10.3 | 0.4 | 24.0 | 4.4 | 14.3 | - | 27.2 |
| P78(254)()(315) | 5.5 | 5.7 | 0.7 | 20.5 | 5.0 | 5.9 | 0.5 | 19.5 | 4.6 | 8.8 | - | 21.6 |
| P79(257)()(250) | 5.7 | 2.9 | 0.9 | 18.0 | 5.6 | 3.0 | 0.5 | 17.1 | 5.1 | 4.4 | - | 17.6 |
| P80(259)(189)(251) | 5.6 | 2.4 | 1.0 | 17.3 | 5.5 | 2.5 | 0.6 | 16.5 | 5.1 | 3.5 | - | 16.6 |
| P81()(209S)(126B) | 2.3 | 2.6 | 0.4 | 13.4 | 2.3 | 3.0 | 0.2 | 13.4 | 2.2 | 3.7 | - | 13.9 |
| P82()(201)(321) | 2.7 | 2.3 | 0.5 | 13.6 | 2.7 | 2.6 | 0.3 | 13.4 | 2.5 | 3.3 | - | 13.8 |
| P83()(203)(174A) | 3.0 | 2.6 | 0.5 | 14.2 | 2.9 | 2.9 | 0.3 | 14.0 | 2.8 | 3.6 | - | 14.3 |
| P84()(200)(154) | 3.0 | 2.1 | 0.6 | 13.8 | 3.0 | 2.4 | 0.4 | 13.6 | 2.8 | 3.0 | - | 13.7 |
| P85()(199)(174B) | 3.1 | 2.5 | 0.5 | 14.3 | 3.1 | 2.8 | 0.3 | 14.1 | 2.9 | 3.5 | - | 14.4 |
| P86()(198)(175) | 3.4 | 2.4 | 0.6 | 14.5 | 3.3 | 2.6 | 0.4 | 14.2 | 3.1 | 3.3 | - | 14.4 |
| M87()(195)(162) | 4.3 | 1.8 | 1.0 | 15.3 | 4.3 | 1.9 | 0.6 | 14.7 | 4.1 | 2.5 | - | 14.6 |
| P88()(194)(111) | 4.4 | 2.0 | 0.9 | 15.6 | 4.4 | 2.1 | 0.5 | 14.9 | 4.2 | 2.8 | - | 14.9 |
| P89()(184)(249) | 5.1 | 3.5 | 0.8 | 17.8 | 4.9 | 3.6 | 0.5 | 17.0 | 4.5 | 5.2 | - | 17.8 |
| P90()(186S)(316) | 6.1 | 2.6 | 1.0 | 18.1 | 6.0 | 2.7 | 0.6 | 17.2 | 5.4 | 4.0 | - | 17.5 |
| P91()(161)(317) | 7.4 | 4.6 | 0.9 | 21.6 | 6.9 | 4.6 | 0.6 | 20.3 | 6.2 | 7.7 | - | 22.2 |
| P92()(169)(320) | 4.8 | 10.9 | 0.5 | 25.3 | 4.2 | 12.6 | 0.4 | 25.8 | 3.9 | 15.0 | - | 27.6 |
| P93()(171)(319) | 3.5 | 10.4 | 0.4 | 23.2 | 3.2 | 12.2 | 0.3 | 24.4 | 3.0 | 15.6 | - | 27.4 |

| Receptor ID<br>P = Private<br>M =Mine owned<br>Respectively<br>(MAC)(Ben)(Man) | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Air quality criteria - 30µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P94()(180)(248) | 4.3 | 4.9 | 0.6 | 18.2 | 4.0 | 5.4 | 0.4 | 17.8 | 3.7 | 7.1 | - | 19.0 |
| P95()(97)(34) | 1.6 | 0.4 | 4.1 | 14.0 | 2.5 | 0.4 | 5.0 | 15.6 | 2.3 | 0.5 | - | 10.6 |
| P96()(90)(193) | 2.1 | 0.7 | 2.9 | 13.6 | 3.4 | 0.7 | 3.1 | 14.9 | 3.0 | 0.8 | - | 11.7 |
| P97()(88N)(183A) | 1.7 | 0.6 | 2.2 | 12.3 | 2.7 | 0.6 | 2.4 | 13.4 | 2.3 | 0.7 | - | 10.8 |
| P98()(88S)(183B) | 1.7 | 0.6 | 2.2 | 12.2 | 2.7 | 0.6 | 2.3 | 13.4 | 2.2 | 0.7 | - | 10.8 |
| P99()(88W)(183C) | 1.7 | 0.6 | 2.2 | 12.3 | 2.7 | 0.6 | 2.4 | 13.4 | 2.2 | 0.7 | - | 10.8 |
| P100()(96)(132A) | 1.6 | 0.5 | 3.2 | 13.1 | 2.5 | 0.5 | 3.8 | 14.5 | 2.2 | 0.6 | - | 10.6 |
| P101(34)()() | 3.0 | 4.7 | 0.3 | 19.5 | 2.6 | 4.0 | 0.2 | 18.8 | 2.0 | 3.8 | - | 19.4 |
| P102(37a)()() | 3.4 | 4.5 | 0.3 | 19.4 | 2.9 | 3.9 | 0.2 | 18.5 | 2.3 | 3.8 | - | 18.8 |
| P103(184a)()() | 6.4 | 2.4 | 1.6 | 18.6 | 9.9 | 2.3 | 1.4 | 21.6 | 11.0 | 3.0 | - | 22.1 |
| P104(37b)()() | 3.4 | 4.7 | 0.3 | 19.6 | 2.9 | 4.0 | 0.2 | 18.7 | 2.3 | 3.9 | - | 18.9 |
| P105(41)()() | 4.8 | 5.0 | 0.3 | 21.1 | 4.0 | 4.4 | 0.3 | 19.4 | 3.0 | 4.2 | - | 18.8 |
| P106(42)()() | 4.8 | 4.9 | 0.3 | 21.0 | 4.0 | 4.3 | 0.3 | 19.3 | 3.0 | 4.1 | - | 18.7 |
| P107(27)()() | 4.4 | 6.5 | 0.3 | 23.2 | 3.7 | 5.4 | 0.2 | 21.9 | 2.8 | 5.0 | - | 21.7 |
| P108(39)()() | 4.5 | 5.0 | 0.3 | 20.8 | 3.7 | 4.3 | 0.3 | 19.2 | 2.9 | 4.1 | - | 18.7 |
| P109(40)()() | 4.5 | 4.9 | 0.3 | 20.7 | 3.8 | 4.3 | 0.3 | 19.1 | 2.9 | 4.1 | - | 18.6 |
| P110(43)()() | 4.9 | 4.9 | 0.3 | 21.1 | 4.0 | 4.3 | 0.3 | 19.3 | 3.1 | 4.1 | - | 18.7 |
| P111(56)()() | 3.1 | 3.5 | 0.3 | 17.3 | 2.7 | 3.1 | 0.2 | 16.5 | 2.2 | 3.0 | - | 16.4 |
| P112(57)()() | 3.0 | 3.3 | 0.3 | 16.9 | 2.6 | 3.0 | 0.2 | 16.1 | 2.1 | 2.9 | - | 16.1 |
| P113(58)()() | 3.0 | 3.2 | 0.3 | 16.8 | 2.6 | 2.9 | 0.2 | 16.0 | 2.1 | 2.9 | - | 15.9 |
| P114(59)()() | 2.8 | 3.1 | 0.3 | 16.3 | 2.5 | 2.8 | 0.2 | 15.6 | 2.0 | 2.7 | - | 15.4 |
| P115(60)()() | 2.9 | 3.0 | 0.3 | 16.3 | 2.6 | 2.7 | 0.2 | 15.4 | 2.0 | 2.7 | - | 15.2 |
| P116(61)()() | 2.8 | 2.9 | 0.3 | 16.0 | 2.5 | 2.6 | 0.2 | 15.2 | 2.0 | 2.6 | - | 15.0 |
| P117(62)()() | 2.8 | 2.8 | 0.3 | 15.8 | 2.4 | 2.5 | 0.2 | 15.0 | 1.9 | 2.5 | - | 14.8 |
| P118(69)()() | 1.3 | 0.9 | 0.2 | 10.7 | 1.1 | 0.9 | 0.1 | 10.5 | 1.0 | 0.9 | - | 10.5 |
| P119(70)()() | 1.4 | 0.9 | 0.2 | 10.8 | 1.2 | 0.9 | 0.1 | 10.6 | 1.1 | 0.9 | - | 10.5 |
| P120(71)()() | 1.4 | 0.9 | 0.2 | 10.9 | 1.2 | 0.9 | 0.1 | 10.6 | 1.1 | 1.0 | - | 10.6 |
| P121(72)()() | 1.5 | 1.0 | 0.2 | 10.9 | 1.3 | 0.9 | 0.1 | 10.7 | 1.1 | 1.0 | - | 10.6 |
| P122(73)()() | 1.5 | 1.0 | 0.2 | 11.0 | 1.3 | 1.0 | 0.1 | 10.7 | 1.2 | 1.0 | - | 10.6 |
| P123(75)()() | 1.6 | 1.0 | 0.2 | 11.1 | 1.3 | 1.0 | 0.1 | 10.7 | 1.2 | 1.0 | - | 10.6 |
| P124(76)()() | 1.6 | 1.0 | 0.2 | 11.2 | 1.4 | 1.0 | 0.1 | 10.7 | 1.3 | 1.0 | - | 10.7 |
| P125(77a)()() | 1.8 | 1.1 | 0.2 | 11.6 | 1.6 | 1.1 | 0.1 | 11.0 | 1.4 | 1.1 | - | 10.9 |
| P126(77b)()() | 1.7 | 1.0 | 0.2 | 11.2 | 1.4 | 1.0 | 0.1 | 10.8 | 1.3 | 1.0 | - | 10.7 |
| P127(78)()() | 2.1 | 1.3 | 0.2 | 12.4 | 1.8 | 1.2 | 0.2 | 11.5 | 1.6 | 1.3 | - | 11.4 |
| P128(79a)()() | 1.7 | 1.0 | 0.2 | 11.3 | 1.5 | 1.0 | 0.1 | 10.7 | 1.4 | 1.0 | - | 10.7 |
| P129(79b)()() | 1.9 | 1.1 | 0.2 | 11.7 | 1.6 | 1.1 | 0.1 | 11.0 | 1.5 | 1.1 | - | 10.9 |
| P130(82)()() | 2.2 | 1.0 | 0.2 | 12.0 | 1.8 | 1.0 | 0.1 | 11.1 | 1.7 | 1.0 | - | 11.0 |
| P131(83)()() | 1.9 | 1.0 | 0.2 | 11.6 | 1.6 | 1.0 | 0.1 | 10.9 | 1.5 | 1.0 | - | 10.8 |
| P132(85)()() | 2.1 | 1.0 | 0.2 | 11.8 | 1.8 | 1.0 | 0.1 | 11.0 | 1.7 | 1.0 | - | 10.9 |
| P133(86)()() | 2.3 | 0.9 | 0.2 | 12.0 | 2.0 | 0.9 | 0.1 | 11.0 | 1.9 | 0.9 | - | 10.9 |
| P134(87)()() | 2.8 | 1.0 | 0.2 | 13.0 | 2.4 | 1.0 | 0.1 | 11.6 | 2.2 | 1.0 | - | 11.5 |
| P135(88)()() | 2.6 | 1.1 | 0.2 | 13.0 | 2.3 | 1.1 | 0.1 | 11.6 | 2.1 | 1.1 | - | 11.5 |
| P136(89)()() | 3.1 | 1.2 | 0.2 | 14.3 | 2.7 | 1.2 | 0.2 | 12.2 | 2.5 | 1.2 | - | 12.0 |
| P137(90)()() | 3.3 | 1.3 | 0.2 | 15.0 | 2.8 | 1.2 | 0.2 | 12.4 | 2.6 | 1.3 | - | 12.2 |
| P138(91)()() | 3.8 | 1.2 | 0.2 | 17.1 | 3.2 | 1.2 | 0.2 | 12.7 | 3.0 | 1.3 | - | 12.6 |
| P139(92)()() | 3.4 | 1.2 | 0.2 | 15.2 | 2.9 | 1.2 | 0.2 | 12.4 | 2.7 | 1.2 | - | 12.2 |
| P140(93)()() | 3.1 | 1.1 | 0.2 | 14.0 | 2.7 | 1.1 | 0.2 | 12.0 | 2.5 | 1.1 | - | 11.9 |

| Receptor ID<br>P = Private<br>M =Mine owned<br>Respectively<br>(MAC)(Ben)(Man) | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Air quality criteria - 30µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P141(94)()() | 3.2 | 1.0 | 0.2 | 14.1 | 2.8 | 1.0 | 0.1 | 12.0 | 2.6 | 1.1 | - | 11.9 |
| P142(95)()() | 2.2 | 0.8 | 0.2 | 11.9 | 2.0 | 0.8 | 0.1 | 10.8 | 1.9 | 0.8 | - | 10.8 |
| P143(96)()() | 2.0 | 0.7 | 0.1 | 11.4 | 1.7 | 0.7 | 0.1 | 10.5 | 1.7 | 0.7 | - | 10.4 |
| P144(97)()() | 2.1 | 0.7 | 0.1 | 11.8 | 1.9 | 0.7 | 0.1 | 10.6 | 1.8 | 0.7 | - | 10.6 |
| P145(98)()() | 2.1 | 0.7 | 0.1 | 11.8 | 1.9 | 0.7 | 0.1 | 10.6 | 1.8 | 0.7 | - | 10.5 |
| P146(99a)()() | 2.2 | 0.7 | 0.1 | 12.0 | 2.0 | 0.7 | 0.1 | 10.7 | 1.9 | 0.7 | - | 10.6 |
| P147(99b)()() | 2.2 | 0.7 | 0.1 | 11.9 | 2.0 | 0.7 | 0.1 | 10.7 | 1.9 | 0.7 | - | 10.6 |
| P148(100)()() | 2.3 | 0.7 | 0.1 | 12.2 | 2.0 | 0.7 | 0.1 | 10.7 | 2.0 | 0.7 | - | 10.7 |
| P149(IR1)()() | 2.8 | 2.4 | 0.3 | 15.1 | 2.4 | 2.2 | 0.2 | 14.0 | 2.0 | 2.2 | - | 13.8 |
| P150(IR2)()() | 2.7 | 2.3 | 0.3 | 15.0 | 2.4 | 2.2 | 0.2 | 13.9 | 2.0 | 2.1 | - | 13.6 |
| P151(IR3)()() | 2.7 | 2.3 | 0.3 | 14.9 | 2.3 | 2.1 | 0.2 | 13.8 | 2.0 | 2.1 | - | 13.6 |
| P152(IR4)()() | 2.7 | 2.2 | 0.3 | 14.8 | 2.3 | 2.1 | 0.2 | 13.7 | 1.9 | 2.1 | - | 13.4 |
| P153(IR5)()() | 2.7 | 2.2 | 0.3 | 14.7 | 2.3 | 2.1 | 0.2 | 13.7 | 1.9 | 2.1 | - | 13.4 |
| P154(IR6)()() | 2.7 | 2.2 | 0.3 | 14.7 | 2.3 | 2.1 | 0.2 | 13.6 | 2.0 | 2.1 | - | 13.4 |
| P155(IR7)()() | 2.7 | 2.2 | 0.3 | 14.7 | 2.3 | 2.1 | 0.2 | 13.6 | 2.0 | 2.1 | - | 13.4 |
| P156(IR8)()() | 2.7 | 2.2 | 0.3 | 14.7 | 2.3 | 2.1 | 0.2 | 13.6 | 2.0 | 2.0 | - | 13.4 |
| P157(IR9)()() | 2.7 | 2.2 | 0.3 | 14.7 | 2.3 | 2.0 | 0.2 | 13.5 | 2.0 | 2.0 | - | 13.3 |
| P158(IR10)()() | 2.8 | 2.2 | 0.3 | 14.9 | 2.4 | 2.1 | 0.2 | 13.7 | 2.0 | 2.1 | - | 13.4 |
| P159(IR11)()() | 2.8 | 2.3 | 0.3 | 14.9 | 2.4 | 2.1 | 0.2 | 13.7 | 2.0 | 2.1 | - | 13.5 |
| P160(IR12)()() | 2.8 | 2.3 | 0.3 | 15.1 | 2.4 | 2.2 | 0.2 | 13.9 | 2.0 | 2.1 | - | 13.7 |
| P161(IR13)()() | 2.8 | 2.4 | 0.3 | 15.2 | 2.4 | 2.2 | 0.2 | 14.0 | 2.0 | 2.2 | - | 13.7 |
| P162(IR14)()() | 2.9 | 2.4 | 0.3 | 15.3 | 2.5 | 2.2 | 0.2 | 14.1 | 2.1 | 2.2 | - | 13.8 |
| P163(IR15)()() | 2.7 | 2.1 | 0.3 | 14.6 | 2.3 | 2.0 | 0.2 | 13.4 | 2.0 | 2.0 | - | 13.2 |
| P164(IR16)()() | 2.7 | 2.1 | 0.3 | 14.5 | 2.3 | 1.9 | 0.2 | 13.3 | 1.9 | 1.9 | - | 13.1 |
| P165(IR17)()() | 2.6 | 2.0 | 0.3 | 14.4 | 2.2 | 1.9 | 0.2 | 13.2 | 1.9 | 1.9 | - | 13.0 |
| P166(IR18)()() | 2.6 | 2.0 | 0.2 | 14.3 | 2.2 | 1.9 | 0.2 | 13.1 | 1.9 | 1.9 | - | 12.9 |
| P167(IR19)()() | 2.7 | 2.0 | 0.3 | 14.4 | 2.3 | 1.9 | 0.2 | 13.2 | 2.0 | 1.9 | - | 13.0 |
| P168(IR20)()() | 2.7 | 2.1 | 0.3 | 14.5 | 2.3 | 1.9 | 0.2 | 13.3 | 2.0 | 1.9 | - | 13.1 |
| P169(IR21)()() | 2.7 | 2.1 | 0.3 | 14.6 | 2.3 | 2.0 | 0.2 | 13.4 | 2.0 | 2.0 | - | 13.2 |
| P170(IR22)()() | 2.7 | 2.1 | 0.3 | 14.7 | 2.3 | 2.0 | 0.2 | 13.4 | 2.0 | 2.0 | - | 13.2 |
| P171(IR23)()() | 2.8 | 2.1 | 0.3 | 14.8 | 2.4 | 2.0 | 0.2 | 13.5 | 2.0 | 2.0 | - | 13.3 |
| P172(IR24)()() | 2.8 | 2.2 | 0.3 | 14.9 | 2.4 | 2.0 | 0.2 | 13.6 | 2.0 | 2.0 | - | 13.4 |
| P173(101)()() | 2.4 | 0.7 | 0.1 | 12.5 | 2.1 | 0.7 | 0.1 | 10.8 | 2.1 | 0.7 | - | 10.8 |
| P174(102)()() | 2.5 | 0.7 | 0.1 | 12.9 | 2.2 | 0.6 | 0.1 | 10.9 | 2.1 | 0.7 | - | 10.8 |
| P175(184c)()() | 4.6 | 1.6 | 1.6 | 15.9 | 7.8 | 1.6 | 1.5 | 18.7 | 7.5 | 2.0 | - | 17.5 |
| P176()(2)() | 1.2 | 2.7 | 0.2 | 19.1 | 1.1 | 2.5 | 0.2 | 20.8 | 0.9 | 2.4 | - | 19.8 |
| P177()(3)() | 1.2 | 2.8 | 0.2 | 18.8 | 1.1 | 2.5 | 0.2 | 20.4 | 0.9 | 2.4 | - | 19.6 |
| P178()(7)() | 1.1 | 2.4 | 0.2 | 15.1 | 1.0 | 2.2 | 0.2 | 16.3 | 0.9 | 2.1 | - | 16.1 |
| P179()(8)() | 1.1 | 2.4 | 0.2 | 15.0 | 1.0 | 2.2 | 0.2 | 16.1 | 0.9 | 2.1 | - | 16.0 |
| P180()(12)() | 1.2 | 2.5 | 0.2 | 15.8 | 1.0 | 2.3 | 0.2 | 17.0 | 0.9 | 2.2 | - | 16.8 |
| P181()(17)() | 1.3 | 2.9 | 0.2 | 18.7 | 1.1 | 2.6 | 0.2 | 20.1 | 1.0 | 2.5 | - | 19.6 |
| P182()(19)() | 1.3 | 3.2 | 0.2 | 19.7 | 1.2 | 2.8 | 0.2 | 21.0 | 1.0 | 2.7 | - | 20.6 |
| P183()(22)() | 1.5 | 3.5 | 0.2 | 20.9 | 1.3 | 3.0 | 0.2 | 21.9 | 1.1 | 2.8 | - | 21.7 |
| P184()(23)() | 1.5 | 3.6 | 0.2 | 21.4 | 1.4 | 3.1 | 0.2 | 22.3 | 1.1 | 2.9 | - | 22.2 |
| P185()(24)() | 1.5 | 3.6 | 0.2 | 21.5 | 1.4 | 3.2 | 0.2 | 22.4 | 1.1 | 2.9 | - | 22.3 |
| P186()(25)() | 1.6 | 3.7 | 0.2 | 20.6 | 1.4 | 3.1 | 0.2 | 21.5 | 1.2 | 3.0 | - | 21.6 |
| P187()(27W)() | 2.0 | 4.7 | 0.3 | 22.5 | 1.7 | 3.8 | 0.2 | 22.9 | 1.4 | 3.6 | - | 24.1 |

| Receptor ID<br>P = Private<br>M =Mine owned<br>Respectively<br>(MAC)(Ben)(Man) | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Air quality criteria - 30µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P188()(30)() | 2.1 | 3.5 | 0.3 | 16.8 | 1.8 | 3.0 | 0.2 | 16.8 | 1.5 | 3.0 | - | 17.1 |
| P189()(31)() | 2.2 | 3.7 | 0.3 | 17.2 | 1.9 | 3.1 | 0.2 | 17.1 | 1.6 | 3.1 | - | 17.5 |
| P190()(33)() | 2.3 | 3.8 | 0.3 | 17.5 | 2.0 | 3.2 | 0.2 | 17.3 | 1.6 | 3.2 | - | 17.8 |
| P191()(39)() | 3.3 | 5.0 | 0.3 | 20.2 | 2.8 | 4.2 | 0.2 | 19.2 | 2.2 | 4.1 | - | 19.7 |
| P192()(54)() | 4.3 | 6.2 | 0.3 | 22.7 | 3.6 | 5.2 | 0.2 | 21.4 | 2.7 | 4.9 | - | 21.2 |
| P193()(81)() | 4.2 | 4.6 | 0.3 | 19.9 | 3.5 | 4.0 | 0.2 | 18.4 | 2.7 | 3.9 | - | 18.1 |
| P194()(83)() | 4.4 | 4.8 | 0.3 | 20.4 | 3.7 | 4.2 | 0.3 | 18.8 | 2.8 | 4.0 | - | 18.4 |
| P195()(84)() | 4.3 | 4.5 | 0.3 | 20.0 | 3.6 | 4.0 | 0.3 | 18.4 | 2.8 | 3.8 | - | 18.0 |
| P196()(63)() | 4.9 | 5.4 | 0.3 | 21.9 | 4.0 | 4.7 | 0.3 | 20.2 | 3.1 | 4.5 | - | 19.6 |
| M197()(M37)() | 4.7 | 7.8 | 0.3 | 25.2 | 4.0 | 6.3 | 0.3 | 23.9 | 3.0 | 5.8 | - | 24.1 |
| M198()(M92)() | 11.8 | 2.6 | 1.7 | 24.7 | 14.1 | 2.4 | 1.2 | 25.7 | 15.4 | 3.3 | - | 26.8 |
| P199()(110S)() | 5.3 | 1.7 | 1.9 | 17.1 | 8.0 | 1.7 | 1.7 | 19.3 | 8.8 | 2.2 | - | 18.9 |
| P200()(85)() | 4.6 | 4.7 | 0.3 | 20.6 | 3.9 | 4.2 | 0.3 | 18.9 | 3.0 | 4.0 | - | 18.4 |
| P201()(108)() | 4.6 | 1.5 | 2.1 | 16.2 | 7.0 | 1.5 | 1.8 | 18.2 | 7.4 | 1.8 | - | 17.2 |
| P202()(112N)() | 9.5 | 2.6 | 1.6 | 22.2 | 12.7 | 2.5 | 1.3 | 24.5 | 14.6 | 3.4 | - | 26.1 |
| | | | | | | | | | | | | |
| P204()(156S)() | 10.7 | 4.4 | 1.0 | 25.1 | 10.4 | 4.4 | 0.7 | 23.8 | 9.0 | 7.6 | - | 25.0 |
| M205()(158)() | 8.1 | 7.2 | 0.8 | 25.2 | 7.2 | 7.3 | 0.5 | 23.6 | 6.4 | 13.5 | - | 28.4 |
| P206()(186N)() | 5.6 | 3.1 | 0.9 | 17.9 | 5.4 | 3.2 | 0.5 | 17.0 | 4.9 | 4.6 | - | 17.6 |
| P207()(209E)() | 2.2 | 2.6 | 0.3 | 13.3 | 2.1 | 3.0 | 0.2 | 13.3 | 2.0 | 3.6 | - | 13.7 |
| P208()(209W)() | 1.9 | 2.5 | 0.3 | 12.9 | 1.9 | 2.9 | 0.2 | 12.9 | 1.8 | 3.4 | - | 13.3 |
| P209()(209N)() | 1.8 | 2.5 | 0.2 | 12.7 | 1.7 | 2.9 | 0.2 | 12.8 | 1.7 | 3.4 | - | 13.2 |
| P210()(222)() | 1.3 | 2.1 | 0.1 | 12.6 | 1.3 | 2.2 | 0.1 | 12.9 | 1.3 | 2.5 | - | 13.0 |
| P211()(230)() | 1.4 | 2.2 | 0.1 | 13.4 | 1.4 | 2.2 | 0.1 | 13.9 | 1.3 | 2.6 | - | 13.9 |
| P212()(252)() | 0.7 | 0.8 | 0.1 | 11.8 | 0.7 | 0.6 | 0.1 | 17.9 | 0.7 | 0.6 | - | 24.5 |
| P213()(286)() | 1.0 | 1.4 | 0.1 | 11.4 | 1.0 | 1.4 | 0.1 | 11.8 | 1.0 | 1.6 | - | 12.1 |
| P214()(287)() | 1.0 | 1.4 | 0.1 | 11.4 | 1.0 | 1.4 | 0.1 | 11.7 | 1.0 | 1.6 | - | 12.0 |
| P215()(288)() | 1.2 | 1.7 | 0.1 | 11.9 | 1.2 | 1.8 | 0.1 | 12.3 | 1.1 | 2.0 | - | 12.4 |
| P216()(289N)() | 0.7 | 1.1 | 0.2 | 21.2 | 0.7 | 1.0 | 0.1 | 27.2 | 0.6 | 1.0 | - | 21.5 |
| P217()(289S)() | 0.7 | 1.2 | 0.2 | 20.9 | 0.7 | 1.1 | 0.1 | 24.4 | 0.6 | 1.1 | - | 19.6 |
| P218()(292W)() | 0.7 | 1.0 | 0.2 | 25.0 | 0.7 | 0.9 | 0.1 | **38.7** | 0.6 | 0.8 | - | 27.5 |
| P219()(292E)() | 0.7 | 1.0 | 0.2 | 22.6 | 0.7 | 0.9 | 0.1 | **35.6** | 0.6 | 0.8 | - | 26.4 |
| M220()(M1)() | 2.6 | 6.8 | 0.3 | 19.0 | 2.5 | 7.4 | 0.2 | 19.5 | 2.3 | 10.4 | - | 22.2 |
| M221()(M2)() | 4.0 | 22.7 | 0.4 | **40.2** | 3.6 | 27.7 | 0.3 | **45.0** | 3.0 | **63.1** | - | **76.5** |
| M222()(M3)() | 3.3 | **45.9** | 0.3 | **63.8** | 2.9 | 29.2 | 0.2 | **48.4** | 2.4 | **37.8** | - | **54.5** |
| M223()(M4)() | 2.7 | 24.4 | 0.3 | **47.9** | 2.5 | 16.4 | 0.2 | **41.1** | 2.1 | 13.0 | - | **52.0** |
| M224()(M5)() | 3.0 | **36.9** | 0.3 | **59.7** | 2.8 | 25.5 | 0.2 | **49.4** | 2.3 | 17.6 | - | **53.8** |
| M225()(M6)() | 3.5 | **38.3** | 0.3 | **60.6** | 3.2 | 24.1 | 0.2 | **48.8** | 2.6 | 15.5 | - | **54.0** |
| M226()(M7)() | 3.3 | 17.9 | 0.3 | **38.1** | 3.0 | 12.2 | 0.2 | **36.0** | 2.4 | 9.7 | - | **104.5** |
| M227()(M8)() | 1.0 | 1.5 | 0.2 | **52.0** | 0.9 | 1.2 | 0.1 | **119.8** | 0.8 | 1.0 | - | **97.5** |
| M228()(M9)() | 1.0 | 1.6 | 0.2 | **926.2** | 0.9 | 1.3 | 0.1 | **380.6** | 0.8 | 1.1 | - | **398.3** |
| M229()(M10)() | 1.6 | 4.1 | 0.2 | **32.3** | 1.5 | 3.6 | 0.2 | **47.3** | 1.2 | 3.4 | - | **48.1** |
| M230()(M11)() | 1.3 | 3.1 | 0.2 | 28.8 | 1.2 | 2.9 | 0.2 | 28.1 | 1.0 | 2.7 | - | 25.7 |
| M231()(M12)() | 3.1 | 12.8 | 0.3 | **31.8** | 2.8 | 9.2 | 0.2 | **31.9** | 2.2 | 7.7 | - | **102.0** |
| M232()(M13)() | 2.1 | 6.4 | 0.3 | **31.8** | 1.9 | 5.2 | 0.2 | **41.8** | 1.6 | 4.6 | - | **68.1** |
| M233()(M14)() | 2.2 | 7.0 | 0.3 | **31.1** | 2.0 | 5.5 | 0.2 | **39.1** | 1.7 | 4.9 | - | **70.1** |
| M234()(M15)() | 2.3 | 6.7 | 0.3 | 26.6 | 2.1 | 5.3 | 0.2 | 30.4 | 1.7 | 4.7 | - | **37.8** |

| Receptor ID<br>P = Private<br>M =Mine owned<br>Respectively<br>(MAC)(Ben)(Man) | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Air quality criteria - 30µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| M235()(M16)() | 2.4 | 6.6 | 0.3 | 25.2 | 2.2 | 5.2 | 0.2 | 27.2 | 1.8 | 4.7 | - | **30.6** |
| M236()(M17)() | 3.0 | 6.0 | 0.3 | 22.6 | 2.6 | 4.9 | 0.2 | 22.4 | 2.0 | 4.6 | - | 23.6 |
| M237()(M18)() | 3.3 | 6.5 | 0.3 | 23.3 | 2.9 | 5.3 | 0.2 | 23.0 | 2.2 | 4.9 | - | 23.8 |
| M238()(M94)() | 8.1 | 7.2 | 0.8 | 25.2 | 7.2 | 7.3 | 0.5 | 23.6 | 6.4 | 13.5 | - | 28.4 |
| M239()(M19)() | 3.2 | 15.1 | 0.3 | **34.3** | 2.9 | 10.6 | 0.2 | **33.3** | 2.3 | 8.6 | - | **139.3** |
| M240()(M20)() | 3.2 | 13.7 | 0.3 | **33.1** | 2.9 | 9.8 | 0.2 | **32.9** | 2.3 | 8.1 | - | **114.7** |
| M241()(M21)() | 2.9 | 11.3 | 0.3 | 29.4 | 2.6 | 8.3 | 0.2 | 29.8 | 2.1 | 6.9 | - | **85.8** |
| M242()(M22)() | 2.8 | 10.3 | 0.3 | 28.5 | 2.5 | 7.6 | 0.2 | 29.3 | 2.0 | 6.5 | - | **63.0** |
| M243()(M23)() | 2.6 | 8.6 | 0.3 | 27.2 | 2.3 | 6.6 | 0.2 | 29.1 | 1.9 | 5.7 | - | **47.8** |
| M244()(M24)() | 3.1 | 11.0 | 0.3 | 30.0 | 2.8 | 8.0 | 0.2 | **30.8** | 2.2 | 6.9 | - | **62.5** |
| M245()(M25)() | 2.6 | 8.0 | 0.3 | 26.8 | 2.4 | 6.1 | 0.2 | 29.0 | 1.9 | 5.4 | - | **38.5** |
| M246()(M26)() | 2.7 | 8.0 | 0.3 | 26.7 | 2.4 | 6.1 | 0.2 | 28.7 | 2.0 | 5.5 | - | **37.0** |
| M247()(M27)() | 2.0 | 4.8 | 0.3 | 23.2 | 1.8 | 3.9 | 0.2 | 23.8 | 1.4 | 3.7 | - | 25.2 |
| M248()(M28)() | 2.4 | 6.4 | 0.3 | 24.9 | 2.1 | 5.0 | 0.2 | 26.7 | 1.7 | 4.6 | - | 29.7 |
| M249()(M29)() | 2.5 | 6.6 | 0.3 | 25.1 | 2.2 | 5.2 | 0.2 | 26.9 | 1.8 | 4.7 | - | 30.1 |
| M250()(M30)() | 2.1 | 4.3 | 0.3 | 19.6 | 1.9 | 3.6 | 0.2 | 19.6 | 1.5 | 3.4 | - | 20.5 |
| M251()(M31)() | 1.6 | 3.1 | 0.2 | 16.2 | 1.5 | 2.7 | 0.2 | 16.7 | 1.2 | 2.6 | - | 16.9 |
| M252()(M32)() | 1.7 | 3.2 | 0.2 | 16.5 | 1.5 | 2.8 | 0.2 | 16.9 | 1.3 | 2.7 | - | 17.2 |
| M253()(M33)() | 4.2 | 12.1 | 0.3 | **30.7** | 3.7 | 9.1 | 0.2 | 30.0 | 2.8 | 7.9 | - | **41.1** |
| M254()(M34)() | 4.0 | 8.6 | 0.3 | 26.2 | 3.5 | 6.8 | 0.2 | 25.7 | 2.7 | 6.2 | - | 27.7 |
| M255()(M35)() | 3.8 | 7.4 | 0.3 | 24.6 | 3.3 | 6.0 | 0.2 | 24.1 | 2.5 | 5.5 | - | 25.0 |
| M256()(M36)() | 6.1 | 14.7 | 0.4 | **33.3** | 5.2 | 10.9 | 0.3 | 29.8 | 3.9 | 9.4 | - | **32.8** |
| M257()(M38)() | 5.0 | 8.1 | 0.3 | 25.8 | 4.2 | 6.5 | 0.3 | 24.4 | 3.2 | 6.0 | - | 24.5 |
| M258()(M39)() | 5.1 | 8.4 | 0.4 | 26.2 | 4.3 | 6.7 | 0.3 | 24.7 | 3.2 | 6.2 | - | 24.9 |
| M259()(M40)() | 5.3 | 8.4 | 0.4 | 26.4 | 4.5 | 6.8 | 0.3 | 24.7 | 3.3 | 6.2 | - | 24.8 |
| M260()(M41)() | 5.7 | 8.8 | 0.4 | 27.0 | 4.8 | 7.1 | 0.3 | 25.2 | 3.6 | 6.5 | - | 25.2 |
| M261()(M42)() | 5.9 | 9.0 | 0.4 | 27.3 | 4.9 | 7.2 | 0.3 | 25.3 | 3.7 | 6.6 | - | 25.3 |
| M262()(M43)() | 6.1 | 9.7 | 0.4 | 28.3 | 5.1 | 7.7 | 0.3 | 26.1 | 3.8 | 7.0 | - | 26.3 |
| M263()(M44)() | 6.2 | 9.4 | 0.4 | 28.0 | 5.3 | 7.5 | 0.3 | 25.9 | 3.9 | 6.8 | - | 25.8 |
| M264()(M45)() | 6.6 | 9.4 | 0.4 | 28.3 | 5.6 | 7.6 | 0.3 | 26.0 | 4.1 | 6.9 | - | 25.7 |
| M265()(M46)() | 7.8 | 21.8 | 0.4 | **41.6** | 6.7 | 15.4 | 0.3 | **34.6** | 4.8 | 12.7 | - | **34.3** |
| M266()(M47)() | **31.0** | **81.0** | 0.8 | **122.6** | 26.0 | **52.1** | 0.6 | **87.7** | 17.0 | **66.7** | - | **93.2** |
| M267()(M48)() | 24.6 | **37.2** | 0.9 | **72.1** | 25.6 | **37.7** | 0.7 | **72.6** | 19.5 | **54.3** | - | **82.7** |
| M268()(M49)() | **42.0** | 26.4 | 0.8 | **79.1** | **47.8** | 19.4 | 0.6 | **76.8** | **35.2** | 20.9 | - | **65.5** |
| M269()(M51)() | 17.2 | 6.6 | 1.2 | **33.9** | 22.6 | 6.5 | 0.9 | **38.2** | 24.5 | 9.5 | - | **42.4** |
| M270()(M52)() | 16.8 | 5.9 | 1.3 | **32.8** | 21.0 | 5.6 | 1.0 | **35.8** | 21.8 | 8.4 | - | **38.6** |
| M271()(M53)() | 12.8 | 4.9 | 1.1 | 27.9 | 13.0 | 4.6 | 0.7 | 26.7 | 11.1 | 7.6 | - | 27.2 |
| M272()(M54)() | 8.8 | 7.5 | 0.8 | 26.3 | 7.8 | 7.8 | 0.5 | 24.7 | 6.9 | 15.4 | - | **30.8** |
| M273()(M55)() | 7.2 | 9.6 | 0.7 | 26.6 | 6.2 | 9.7 | 0.5 | 25.1 | 5.6 | 17.0 | - | **31.2** |
| M274()(M56)() | 5.6 | 14.8 | 0.5 | **30.5** | 4.8 | 17.2 | 0.4 | **31.5** | 4.4 | 21.8 | - | **35.2** |
| M275()(M57)() | 4.4 | 19.9 | 0.4 | **35.2** | 3.9 | 23.4 | 0.3 | **37.9** | 3.5 | **41.1** | - | **54.1** |
| M276()(M58)() | 7.0 | 9.2 | 0.4 | 28.5 | 5.9 | 7.5 | 0.3 | 26.0 | 4.3 | 6.8 | - | 25.4 |
| M277()(M59)() | 7.2 | 9.0 | 0.4 | 28.3 | 6.0 | 7.4 | 0.3 | 25.8 | 4.3 | 6.7 | - | 25.0 |
| M278()(M61)() | 9.6 | 6.1 | 0.4 | 27.5 | 7.8 | 5.5 | 0.3 | 23.8 | 5.9 | 5.2 | - | 21.9 |
| M279()(M62)() | 10.1 | 6.2 | 0.4 | 28.0 | 8.1 | 5.6 | 0.3 | 24.1 | 6.2 | 5.3 | - | 22.2 |
| M280()(M63)() | 10.3 | 6.3 | 0.4 | 28.4 | 8.2 | 5.7 | 0.3 | 24.5 | 6.3 | 5.4 | - | 22.5 |
| M281()(M64)() | 10.9 | 6.5 | 0.4 | 29.2 | 8.7 | 5.8 | 0.3 | 25.0 | 6.6 | 5.5 | - | 22.9 |

| Receptor ID<br>P = Private<br>M =Mine owned<br>Respectively<br>(MAC)(Ben)(Man) | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Air quality criteria - 30µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| M282()(M65)() | 14.9 | 7.3 | 0.4 | **34.1** | 11.3 | 6.6 | 0.3 | 28.3 | 8.4 | 6.2 | - | 25.4 |
| M283()(M66)() | 17.2 | 7.5 | 0.4 | **36.7** | 12.6 | 6.8 | 0.3 | 29.9 | 9.2 | 6.4 | - | 26.6 |
| M284()(M67)() | 24.0 | 8.1 | 0.5 | **44.2** | 15.8 | 7.2 | 0.4 | **33.6** | 10.7 | 6.9 | - | 28.7 |
| M285()(M68)() | 24.2 | 9.0 | 0.5 | **45.1** | 16.2 | 7.8 | 0.4 | **34.7** | 10.5 | 7.4 | - | 29.2 |
| M286()(M69)() | **34.1** | 9.6 | 0.5 | **55.8** | 20.1 | 8.2 | 0.4 | **38.9** | 11.3 | 7.8 | - | 30.2 |
| M287()(M70)() | **74.3** | 10.3 | 0.5 | **96.5** | 30.1 | 8.6 | 0.4 | **49.0** | 13.9 | 8.2 | - | **32.9** |
| M288()(M71)() | **87.1** | 14.2 | 0.6 | **112.7** | **57.0** | 11.5 | 0.5 | **78.6** | 19.8 | 10.2 | - | **40.5** |
| M289()(M72)() | **120.7** | 15.4 | 0.7 | **147.2** | **101.8** | 12.7 | 0.5 | **124.4** | **34.3** | 11.4 | - | **55.9** |
| M290()(M73)() | **119.8** | 15.9 | 0.7 | **146.9** | **97.8** | 13.2 | 0.5 | **120.7** | **38.1** | 11.9 | - | **60.1** |
| M291()(M74)() | **142.0** | 14.7 | 0.7 | **167.8** | **108.4** | 12.2 | 0.5 | **130.3** | **53.8** | 11.5 | - | **75.2** |
| M292()(M75)() | **121.0** | 14.4 | 0.7 | **146.4** | **101.8** | 11.9 | 0.5 | **123.4** | **68.1** | 11.5 | - | **89.4** |
| M293()(M76)() | **418.1** | 10.6 | 0.7 | **439.7** | **274.9** | 8.8 | 0.5 | **293.3** | **147.8** | 8.5 | - | **165.9** |
| M294()(M77)() | **73.9** | 10.9 | 0.8 | **95.3** | **242.3** | 8.7 | 0.6 | **260.3** | **188.2** | 8.6 | - | **205.7** |
| M295()(M78)() | **50.3** | 10.3 | 0.9 | **70.9** | **257.9** | 8.8 | 0.7 | **276.0** | **236.9** | 9.0 | - | **254.8** |
| M296()(M79)() | **43.5** | 9.4 | 0.9 | **63.1** | **387.2** | 8.3 | 0.7 | **404.8** | **271.4** | 8.3 | - | **288.5** |
| M297()(M80)() | **35.0** | 9.0 | 0.9 | **54.2** | **98.3** | 8.3 | 0.7 | **115.8** | **128.1** | 9.1 | - | **146.0** |
| M298()(M81)() | **34.8** | 7.9 | 0.9 | **52.7** | **95.3** | 7.4 | 0.7 | **112.0** | **120.6** | 7.9 | - | **137.2** |
| M299()(M82)() | 21.0 | 7.3 | 1.1 | **38.1** | 29.8 | 7.1 | 0.9 | **46.1** | **35.0** | 8.5 | - | **52.1** |
| M300()(M83)() | 16.8 | 6.7 | 1.2 | **33.4** | 23.1 | 6.8 | 0.9 | **39.1** | 26.2 | 8.7 | - | **43.3** |
| M301()(M84)() | 8.2 | 3.3 | 1.3 | 21.2 | 12.9 | 3.4 | 1.1 | 25.5 | 15.1 | 4.1 | - | 27.5 |
| M302()(M85)() | 5.7 | 2.1 | 1.6 | 17.6 | 9.2 | 2.1 | 1.4 | 20.7 | 9.9 | 2.7 | - | 20.7 |
| M303()(M93)() | 10.7 | 2.1 | 1.8 | 23.2 | 12.4 | 2.0 | 1.2 | 23.6 | 13.2 | 2.6 | - | 23.9 |
| M304()(M95)() | 7.2 | 1.3 | 2.0 | 18.9 | 8.0 | 1.3 | 1.3 | 18.4 | 8.2 | 1.7 | - | 17.8 |
| P305()()(19) | 0.6 | 0.2 | 0.7 | 9.2 | 0.8 | 0.2 | 0.7 | 9.4 | 0.8 | 0.2 | - | 8.7 |
| P306()()(25) | 1.5 | 0.3 | 9.0 | 18.6 | 2.2 | 0.3 | 9.7 | 19.9 | 2.1 | 0.4 | - | 10.3 |
| P307()()(54) | 0.6 | 0.2 | 0.7 | 9.1 | 0.8 | 0.2 | 0.9 | 9.5 | 0.8 | 0.2 | - | 8.7 |
| M308()()(56) | 1.7 | 0.3 | 23.6 | **33.4** | 2.1 | 0.3 | 12.5 | 22.6 | 2.3 | 0.4 | - | 10.4 |
| P309()()(79) | 0.6 | 0.2 | 0.7 | 9.2 | 0.8 | 0.2 | 0.9 | 9.5 | 0.8 | 0.2 | - | 8.7 |
| P310()()(81) | 1.9 | 0.4 | 9.2 | 19.4 | 2.3 | 0.4 | 3.2 | 13.6 | 2.5 | 0.5 | - | 10.7 |
| P311()()(83) | 1.4 | 0.3 | 8.0 | 17.4 | 1.9 | 0.3 | 27.0 | **36.8** | 2.0 | 0.3 | - | 10.0 |
| P312()()(109) | 1.0 | 0.2 | 5.2 | 14.2 | 1.3 | 0.2 | 4.1 | 13.2 | 1.4 | 0.3 | - | 9.3 |
| P313()()(110) | 1.5 | 0.3 | 7.4 | 17.0 | 1.8 | 0.3 | 3.6 | 13.4 | 1.9 | 0.4 | - | 10.0 |
| P314()()(114) | 0.6 | 0.2 | 0.7 | 9.1 | 0.8 | 0.2 | 0.8 | 9.4 | 0.8 | 0.2 | - | 8.7 |
| P315()()(121) | 0.9 | 0.3 | 2.0 | 11.0 | 1.4 | 0.3 | 2.2 | 11.5 | 1.3 | 0.3 | - | 9.4 |
| P316()()(124) | 1.4 | 0.4 | 2.6 | 12.2 | 1.6 | 0.4 | 1.5 | 11.2 | 1.7 | 0.5 | - | 9.9 |
| P317()()(128) | 2.0 | 0.8 | 1.0 | 11.7 | 2.1 | 0.9 | 0.5 | 11.2 | 2.1 | 1.1 | - | 10.9 |
| P318()()(130) | 1.4 | 0.3 | 9.4 | 18.9 | 1.7 | 0.3 | 5.3 | 15.0 | 1.9 | 0.4 | - | 9.9 |
| P319()()(135) | 0.5 | 0.1 | 0.5 | 8.8 | 0.7 | 0.2 | 0.7 | 9.1 | 0.7 | 0.2 | - | 8.5 |
| P320()()(139) | 2.1 | 0.8 | 1.1 | 11.9 | 2.2 | 0.9 | 0.6 | 11.4 | 2.3 | 1.1 | - | 11.1 |
| P321()()(141) | 0.6 | 0.2 | 0.7 | 9.2 | 0.8 | 0.2 | 0.8 | 9.5 | 0.8 | 0.2 | - | 8.7 |
| P322()()(144) | 1.9 | 0.7 | 1.2 | 11.7 | 2.1 | 0.8 | 0.7 | 11.2 | 2.1 | 0.9 | - | 10.8 |
| P323()()(147) | 0.6 | 0.2 | 0.7 | 9.1 | 0.8 | 0.2 | 0.7 | 9.4 | 0.8 | 0.2 | - | 8.7 |
| P324()()(126A) | 2.5 | 2.7 | 0.4 | 13.6 | 2.4 | 3.0 | 0.3 | 13.6 | 2.3 | 3.7 | - | 14.0 |
| P325()()(237) | 5.8 | 1.6 | 2.1 | 17.7 | 8.4 | 1.6 | 1.7 | 19.5 | 9.4 | 2.0 | - | 19.4 |
| | | | | | | | | | | | | |
| P327()()(148) | 1.4 | 0.3 | 8.6 | 18.1 | 1.7 | 0.3 | 4.8 | 14.4 | 1.8 | 0.4 | - | 9.9 |
| P328()()(151) | 0.6 | 0.2 | 0.7 | 9.1 | 0.8 | 0.2 | 0.8 | 9.4 | 0.8 | 0.2 | - | 8.7 |

| Receptor ID<br>P = Private<br>M =Mine owned<br>Respectively<br>(MAC)(Ben)(Man) | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Air quality criteria - 30µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P329()()(156) | 1.3 | 0.5 | 1.2 | 10.8 | 1.5 | 0.5 | 0.8 | 10.4 | 1.5 | 0.6 | - | 9.9 |
| P330()()(157) | 2.2 | 0.9 | 1.0 | 12.0 | 2.3 | 1.0 | 0.5 | 11.5 | 2.3 | 1.2 | - | 11.2 |
| P331()()(164) | 0.8 | 0.2 | 1.4 | 10.1 | 1.1 | 0.2 | 1.4 | 10.4 | 1.1 | 0.3 | - | 9.0 |
| P332()()(165) | 1.7 | 0.6 | 1.3 | 11.4 | 1.8 | 0.6 | 0.8 | 11.0 | 1.9 | 0.8 | - | 10.4 |
| P333()()(166) | 0.5 | 0.2 | 0.6 | 9.0 | 0.7 | 0.2 | 0.8 | 9.3 | 0.7 | 0.2 | - | 8.6 |
| P334()()(170) | 1.9 | 0.9 | 0.8 | 11.5 | 2.0 | 0.9 | 0.5 | 11.2 | 2.1 | 1.1 | - | 11.0 |
| P335()()(171) | 2.0 | 1.0 | 0.7 | 11.6 | 2.1 | 1.1 | 0.4 | 11.3 | 2.1 | 1.3 | - | 11.2 |
| P336()()(172) | 1.6 | 0.6 | 1.3 | 11.3 | 1.8 | 0.6 | 0.8 | 10.9 | 1.9 | 0.8 | - | 10.4 |
| P337()()(176) | 0.8 | 0.2 | 1.5 | 10.1 | 1.0 | 0.2 | 2.4 | 11.3 | 1.1 | 0.2 | - | 9.0 |
| P338()()(177) | 0.6 | 0.2 | 0.9 | 9.4 | 0.9 | 0.2 | 0.9 | 9.7 | 0.8 | 0.2 | - | 8.8 |
| P339()()(178) | 0.6 | 0.2 | 0.8 | 9.4 | 0.8 | 0.2 | 0.9 | 9.6 | 0.8 | 0.2 | - | 8.7 |
| P340()()(184) | 0.9 | 0.3 | 1.4 | 10.4 | 1.3 | 0.4 | 1.8 | 11.1 | 1.2 | 0.4 | - | 9.4 |
| P341()()(185) | 1.1 | 0.4 | 1.5 | 10.8 | 1.6 | 0.4 | 1.8 | 11.5 | 1.4 | 0.5 | - | 9.7 |
| P342()()(187) | 1.1 | 0.4 | 1.5 | 10.7 | 1.6 | 0.4 | 1.7 | 11.5 | 1.4 | 0.5 | - | 9.6 |
| P343()()(189) | 1.2 | 0.5 | 1.8 | 11.3 | 1.9 | 0.5 | 2.0 | 12.2 | 1.6 | 0.6 | - | 10.0 |
| | | | | | | | | | | | | |
| P345()()(199) | 0.8 | 0.3 | 1.2 | 10.0 | 1.1 | 0.3 | 1.4 | 10.6 | 1.1 | 0.4 | - | 9.2 |
| P346()()(200) | 0.8 | 0.3 | 1.2 | 10.0 | 1.1 | 0.3 | 1.4 | 10.4 | 1.1 | 0.3 | - | 9.1 |
| P347()()(204) | 0.8 | 0.3 | 0.8 | 9.6 | 1.0 | 0.3 | 1.0 | 10.0 | 1.0 | 0.4 | - | 9.1 |
| P348()()(205) | 1.9 | 1.0 | 0.6 | 11.5 | 2.0 | 1.1 | 0.4 | 11.2 | 2.0 | 1.4 | - | 11.1 |
| P349()()(206) | 1.7 | 0.9 | 0.7 | 11.2 | 1.8 | 1.0 | 0.4 | 10.9 | 1.8 | 1.2 | - | 10.8 |
| P350()()(207) | 1.4 | 0.7 | 0.5 | 10.5 | 1.4 | 0.8 | 0.4 | 10.4 | 1.4 | 1.0 | - | 10.2 |
| P351()()(208) | 1.2 | 0.6 | 0.6 | 10.1 | 1.2 | 0.6 | 0.4 | 10.0 | 1.2 | 0.8 | - | 9.7 |
| P352()()(209) | 0.7 | 0.2 | 1.5 | 10.1 | 1.0 | 0.2 | 2.4 | 11.2 | 1.0 | 0.2 | - | 8.9 |
| P353()()(210) | 0.3 | 0.1 | 0.3 | 8.4 | 0.4 | 0.1 | 0.4 | 8.6 | 0.4 | 0.1 | - | 8.2 |
| P354()()(211) | 0.4 | 0.1 | 0.3 | 8.5 | 0.5 | 0.1 | 0.4 | 8.6 | 0.5 | 0.1 | - | 8.3 |
| P355()()(212B) | 0.3 | 0.1 | 0.2 | 8.3 | 0.4 | 0.1 | 0.3 | 8.4 | 0.4 | 0.1 | - | 8.2 |
| P356()()(213) | 0.6 | 0.2 | 0.6 | 9.1 | 0.7 | 0.2 | 0.7 | 9.2 | 0.7 | 0.2 | - | 8.6 |
| P357()()(214) | 0.5 | 0.2 | 0.5 | 8.9 | 0.7 | 0.2 | 0.6 | 9.1 | 0.7 | 0.2 | - | 8.6 |
| P358()()(215) | 0.6 | 0.2 | 0.6 | 9.1 | 0.7 | 0.2 | 0.7 | 9.3 | 0.7 | 0.3 | - | 8.7 |
| P359()()(216) | 0.6 | 0.2 | 0.7 | 9.2 | 0.8 | 0.2 | 0.8 | 9.5 | 0.8 | 0.3 | - | 8.7 |
| P360()()(217) | 0.6 | 0.2 | 0.7 | 9.3 | 0.8 | 0.2 | 0.8 | 9.6 | 0.8 | 0.3 | - | 8.8 |
| P361()()(218) | 0.7 | 0.3 | 0.8 | 9.5 | 0.9 | 0.3 | 0.9 | 9.8 | 0.9 | 0.3 | - | 8.9 |
| P362()()(219) | 0.7 | 0.3 | 0.8 | 9.4 | 0.9 | 0.3 | 0.9 | 9.7 | 0.9 | 0.3 | - | 8.9 |
| P363()()(220) | 0.7 | 0.3 | 0.7 | 9.3 | 0.8 | 0.3 | 0.8 | 9.6 | 0.8 | 0.3 | - | 8.8 |
| P364()()(222) | 0.7 | 0.3 | 0.7 | 9.4 | 0.9 | 0.3 | 0.8 | 9.7 | 0.9 | 0.4 | - | 8.9 |
| P365()()(223) | 0.7 | 0.3 | 0.7 | 9.4 | 0.9 | 0.3 | 0.8 | 9.7 | 0.9 | 0.4 | - | 8.9 |
| P366()()(254A) | 0.4 | 0.1 | 0.4 | 8.6 | 0.6 | 0.1 | 0.6 | 8.9 | 0.6 | 0.1 | - | 8.3 |
| P367()()(253) | 0.6 | 0.2 | 0.7 | 9.1 | 0.8 | 0.2 | 0.7 | 9.3 | 0.7 | 0.2 | - | 8.6 |
| P368()()(255) | 0.5 | 0.1 | 0.6 | 8.9 | 0.7 | 0.1 | 0.9 | 9.3 | 0.7 | 0.2 | - | 8.5 |
| P369()()(256) | 0.6 | 0.1 | 0.7 | 9.1 | 0.7 | 0.1 | 1.1 | 9.7 | 0.8 | 0.2 | - | 8.6 |
| P370()()(258) | 1.6 | 0.7 | 0.7 | 10.9 | 1.7 | 0.8 | 0.5 | 10.7 | 1.7 | 1.0 | - | 10.5 |
| P371()()(259) | 1.7 | 0.9 | 0.6 | 11.1 | 1.8 | 1.0 | 0.4 | 10.9 | 1.8 | 1.2 | - | 10.8 |
| P372()()(260) | 1.7 | 0.9 | 0.6 | 11.1 | 1.8 | 1.0 | 0.4 | 10.9 | 1.8 | 1.2 | - | 10.8 |
| P373()()(261) | 1.6 | 1.0 | 0.4 | 11.0 | 1.6 | 1.2 | 0.3 | 10.8 | 1.6 | 1.4 | - | 10.8 |
| P374()()(263) | 1.8 | 1.0 | 0.5 | 11.3 | 1.9 | 1.1 | 0.3 | 11.1 | 1.8 | 1.4 | - | 11.0 |
| P375()()(264) | 0.6 | 0.2 | 0.9 | 9.4 | 0.8 | 0.2 | 0.9 | 9.6 | 0.8 | 0.3 | - | 8.8 |

| Receptor ID<br>P = Private<br>M =Mine owned<br>Respectively<br>(MAC)(Ben)(Man) | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Air quality criteria - 30µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| P376()()(265) | 0.4 | 0.1 | 0.4 | 8.6 | 0.5 | 0.1 | 0.6 | 8.9 | 0.5 | 0.1 | - | 8.3 |
| P377()()(266) | 0.4 | 0.1 | 0.4 | 8.7 | 0.6 | 0.1 | 0.5 | 8.9 | 0.6 | 0.2 | - | 8.4 |
| P378()()(270) | 0.6 | 0.2 | 0.6 | 9.1 | 0.7 | 0.2 | 0.7 | 9.2 | 0.7 | 0.2 | - | 8.6 |
| P379()()(283) | 0.6 | 0.2 | 0.7 | 9.2 | 0.7 | 0.2 | 0.7 | 9.3 | 0.7 | 0.2 | - | 8.7 |
| P380()()(285) | 0.6 | 0.2 | 0.7 | 9.2 | 0.8 | 0.2 | 0.8 | 9.5 | 0.8 | 0.3 | - | 8.7 |
| P381()()(286) | 0.6 | 0.2 | 0.7 | 9.2 | 0.8 | 0.2 | 0.8 | 9.5 | 0.8 | 0.3 | - | 8.7 |
| P382()()(287) | 0.6 | 0.2 | 0.7 | 9.2 | 0.8 | 0.2 | 0.8 | 9.5 | 0.8 | 0.3 | - | 8.7 |
| P383()()(288) | 0.6 | 0.2 | 0.6 | 9.1 | 0.7 | 0.2 | 0.7 | 9.3 | 0.7 | 0.3 | - | 8.7 |
| P384()()(290) | 0.7 | 0.2 | 1.0 | 9.6 | 0.9 | 0.2 | 1.0 | 9.8 | 0.9 | 0.3 | - | 8.8 |
| P385()()(291) | 0.6 | 0.2 | 0.6 | 9.1 | 0.7 | 0.2 | 0.7 | 9.3 | 0.7 | 0.3 | - | 8.6 |
| P386()()(292) | 0.6 | 0.2 | 0.6 | 9.1 | 0.7 | 0.2 | 0.7 | 9.3 | 0.7 | 0.3 | - | 8.7 |
| P387()()(293) | 0.6 | 0.2 | 0.7 | 9.1 | 0.7 | 0.2 | 0.7 | 9.3 | 0.7 | 0.2 | - | 8.6 |
| P388()()(294) | 0.8 | 0.3 | 1.0 | 9.7 | 1.0 | 0.3 | 1.1 | 10.1 | 1.0 | 0.4 | - | 9.0 |
| P389()()(106A) | 0.5 | 0.1 | 0.6 | 8.9 | 0.7 | 0.2 | 0.9 | 9.4 | 0.7 | 0.2 | - | 8.6 |
| P390()()(106B) | 0.6 | 0.1 | 0.6 | 9.0 | 0.8 | 0.2 | 1.0 | 9.5 | 0.8 | 0.2 | - | 8.6 |
| P391()()(112A) | 0.5 | 0.2 | 0.6 | 8.9 | 0.7 | 0.2 | 0.7 | 9.2 | 0.7 | 0.2 | - | 8.6 |
| P392()()(112B) | 0.5 | 0.2 | 0.6 | 8.9 | 0.7 | 0.2 | 0.7 | 9.2 | 0.7 | 0.2 | - | 8.6 |
| P393()()(112C) | 0.5 | 0.2 | 0.6 | 8.9 | 0.7 | 0.2 | 0.7 | 9.2 | 0.7 | 0.2 | - | 8.6 |
| P394()()(112D) | 0.5 | 0.2 | 0.6 | 8.9 | 0.7 | 0.2 | 0.7 | 9.2 | 0.7 | 0.2 | - | 8.5 |
| P395()()(132B) | 1.7 | 0.5 | 3.4 | 13.4 | 2.6 | 0.5 | 3.9 | 14.8 | 2.4 | 0.6 | - | 10.7 |
| P396()()(134A) | 1.3 | 0.3 | 4.7 | 14.1 | 1.6 | 0.3 | 2.5 | 12.0 | 1.7 | 0.4 | - | 9.8 |
| P397()()(134B) | 1.4 | 0.3 | 4.8 | 14.3 | 1.6 | 0.4 | 2.5 | 12.1 | 1.8 | 0.4 | - | 9.9 |
| P398()()(134C) | 1.3 | 0.3 | 4.2 | 13.6 | 1.6 | 0.4 | 2.2 | 11.8 | 1.7 | 0.4 | - | 9.8 |
| P399()()(134D) | 1.3 | 0.4 | 2.1 | 11.5 | 1.4 | 0.4 | 1.3 | 10.8 | 1.5 | 0.5 | - | 9.7 |
| P400()()(173B) | 2.4 | 2.7 | 0.4 | 13.7 | 2.4 | 3.1 | 0.3 | 13.6 | 2.3 | 3.8 | - | 14.1 |
| P401()()(201A) | 1.3 | 0.5 | 1.6 | 11.2 | 2.0 | 0.5 | 1.8 | 12.1 | 1.7 | 0.6 | - | 10.1 |
| P402()()(201B) | 1.3 | 0.5 | 1.6 | 11.2 | 2.0 | 0.5 | 1.7 | 12.0 | 1.7 | 0.6 | - | 10.1 |
| P403()()(201C) | 1.3 | 0.5 | 1.6 | 11.1 | 2.0 | 0.5 | 1.7 | 12.0 | 1.7 | 0.6 | - | 10.1 |
| P404()()(21B) | 0.5 | 0.1 | 0.4 | 8.7 | 0.6 | 0.1 | 0.6 | 9.0 | 0.6 | 0.2 | - | 8.4 |
| P405()()(284A) | 0.6 | 0.2 | 0.6 | 9.1 | 0.7 | 0.2 | 0.7 | 9.2 | 0.7 | 0.2 | - | 8.6 |
| P406()()(284B) | 0.5 | 0.2 | 0.6 | 9.0 | 0.7 | 0.2 | 0.6 | 9.2 | 0.7 | 0.2 | - | 8.6 |
| P407()()(96B) | 5.3 | 2.1 | 1.1 | 16.8 | 5.4 | 2.2 | 0.6 | 16.0 | 5.0 | 3.0 | - | 16.0 |
| P408()()(168) | 5.3 | 2.1 | 1.0 | 16.8 | 5.4 | 2.2 | 0.6 | 16.1 | 5.0 | 3.1 | - | 16.0 |
| P409()()(125D) | 3.0 | 0.7 | 5.0 | 16.6 | 4.5 | 0.7 | 4.2 | 17.1 | 4.6 | 0.9 | - | 13.3 |
| P410()()(125E) | 2.9 | 0.7 | 5.0 | 16.5 | 4.4 | 0.7 | 4.2 | 17.1 | 4.5 | 0.9 | - | 13.2 |
| P411()()(125F) | 2.9 | 0.7 | 5.0 | 16.6 | 4.4 | 0.7 | 4.2 | 17.1 | 4.6 | 0.9 | - | 13.2 |
| P412()()(309) | 3.1 | 2.1 | 0.6 | 13.8 | 3.1 | 2.3 | 0.4 | 13.6 | 2.9 | 2.9 | - | 13.7 |
| | | | | | | | | | | | | |
| M414()()(2) | 1.8 | 0.3 | **34.2** | **44.1** | 2.3 | 0.3 | 26.7 | **37.0** | 2.5 | 0.4 | - | 10.6 |
| M415()()(9) | 4.1 | 0.6 | 12.2 | 24.9 | 5.0 | 0.6 | 7.4 | 20.8 | 5.5 | 0.8 | - | 14.1 |
| M416()()(10) | 4.1 | 1.1 | 1.7 | 15.1 | 4.4 | 1.2 | 0.9 | 14.2 | 4.4 | 1.5 | - | 13.7 |
| M417()()(11) | 3.5 | 0.7 | 3.4 | 15.7 | 3.9 | 0.8 | 1.5 | 13.9 | 4.2 | 0.9 | - | 12.9 |
| M418()()(16) | 4.5 | 0.7 | 4.9 | 18.2 | 5.2 | 0.8 | 2.2 | 15.9 | 5.6 | 0.9 | - | 14.4 |
| M419()()(26) | 3.4 | 1.2 | 1.2 | 13.9 | 3.6 | 1.3 | 0.6 | 13.3 | 3.5 | 1.7 | - | 13.0 |
| M420()()(28) | 1.4 | 0.3 | 9.0 | 18.4 | 1.8 | 0.3 | 18.7 | 28.5 | 2.0 | 0.3 | - | 10.0 |
| M421()()(30) | 1.0 | 0.3 | 2.3 | 11.3 | 1.5 | 0.3 | 2.7 | 12.2 | 1.4 | 0.4 | - | 9.5 |
| M422()()(31) | 3.4 | 0.7 | 3.2 | 15.3 | 3.7 | 0.8 | 1.4 | 13.6 | 3.9 | 1.0 | - | 12.7 |

| Receptor ID<br><br>P = Private<br>M =Mine owned<br><br>Respectively<br>(MAC)(Ben)(Man) | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Air quality criteria - 30µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| M423()()(37) | 1.0 | 0.3 | 2.3 | 11.3 | 1.5 | 0.3 | 2.7 | 12.2 | 1.4 | 0.4 | - | 9.5 |
| M424()()(38) | 4.5 | 0.7 | 9.0 | 22.3 | 5.6 | 0.7 | 5.6 | 19.7 | 6.1 | 0.9 | - | 14.8 |
| M425()()(39) | 2.2 | 0.8 | 1.2 | 12.2 | 2.4 | 0.9 | 0.6 | 11.6 | 2.4 | 1.1 | - | 11.3 |
| M426()()(40) | 3.6 | 1.4 | 1.0 | 14.1 | 3.7 | 1.5 | 0.6 | 13.6 | 3.6 | 2.0 | - | 13.4 |
| M427()()(44) | 2.1 | 0.4 | 13.5 | 23.9 | 2.5 | 0.5 | 3.1 | 13.7 | 2.7 | 0.6 | - | 11.0 |
| M428()()(48) | 5.6 | 0.9 | 4.0 | 18.8 | 6.7 | 0.9 | 2.4 | 17.8 | 7.4 | 1.1 | - | 16.4 |
| M429()()(49) | 2.2 | 0.5 | 15.0 | 25.6 | 2.6 | 0.5 | 2.8 | 13.6 | 2.8 | 0.6 | - | 11.1 |
| M430()()(51) | 1.6 | 0.3 | 18.3 | 28.0 | 2.1 | 0.3 | 14.9 | 25.0 | 2.2 | 0.4 | - | 10.3 |
| M431()()(55) | 3.9 | 1.3 | 1.3 | 14.6 | 4.1 | 1.3 | 0.7 | 13.9 | 4.0 | 1.7 | - | 13.6 |
| M432()()(57) | 1.0 | 0.2 | 2.9 | 11.9 | 1.4 | 0.2 | 5.9 | 15.2 | 1.5 | 0.3 | - | 9.4 |
| M433()()(60) | 2.2 | 0.4 | 14.9 | 25.4 | 2.5 | 0.5 | 3.1 | 13.8 | 2.8 | 0.6 | - | 11.0 |
| M434()()(64) | 3.5 | 0.9 | 2.2 | 14.6 | 3.8 | 0.9 | 1.0 | 13.5 | 3.9 | 1.2 | - | 12.9 |
| M435()()(69) | 4.2 | 0.7 | 9.9 | 22.8 | 5.3 | 0.7 | 6.2 | 19.9 | 5.9 | 0.8 | - | 14.5 |
| M436()()(71) | 2.7 | 1.2 | 0.8 | 12.7 | 2.8 | 1.3 | 0.5 | 12.3 | 2.7 | 1.7 | - | 12.2 |
| M437()()(72) | 1.7 | 0.3 | 19.1 | 28.9 | 2.1 | 0.3 | 10.1 | 20.1 | 2.2 | 0.4 | - | 10.3 |
| M438()()(77) | 4.5 | 0.7 | 6.2 | 19.6 | 5.3 | 0.7 | 3.1 | 16.9 | 5.8 | 0.9 | - | 14.5 |
| M439()()(80) | 2.0 | 0.4 | 10.6 | 21.0 | 2.4 | 0.5 | 3.1 | 13.6 | 2.6 | 0.6 | - | 10.9 |
| M440()()(82) | 2.1 | 0.4 | **60.2** | **70.5** | 2.5 | 0.4 | 7.4 | 18.0 | 2.7 | 0.5 | - | 10.9 |
| M441()()(84) | 2.7 | 0.6 | 7.6 | 18.8 | 3.1 | 0.6 | 1.9 | 13.4 | 3.4 | 0.7 | - | 11.9 |
| M442()()(85) | 3.7 | 0.9 | 2.0 | 14.6 | 3.9 | 1.0 | 0.9 | 13.6 | 4.0 | 1.2 | - | 13.1 |
| M443()()(88) | 2.9 | 0.7 | 2.7 | 14.3 | 3.2 | 0.8 | 1.1 | 12.7 | 3.3 | 1.0 | - | 12.0 |
| M444()()(90) | 2.5 | 0.6 | 6.7 | 17.7 | 2.9 | 0.6 | 1.6 | 12.8 | 3.1 | 0.8 | - | 11.5 |
| M445()()(91) | 1.9 | 0.4 | 11.5 | 21.6 | 2.2 | 0.4 | 4.0 | 14.3 | 2.4 | 0.5 | - | 10.6 |
| M446()()(92) | 2.1 | 0.4 | 13.1 | 23.5 | 2.5 | 0.5 | 3.2 | 13.8 | 2.7 | 0.6 | - | 10.9 |
| M447()()(95) | 2.0 | 0.5 | 3.2 | 13.6 | 2.3 | 0.6 | 1.4 | 12.0 | 2.5 | 0.7 | - | 10.9 |
| M448()()(101) | 2.5 | 0.8 | 2.2 | 13.4 | 2.7 | 0.8 | 0.9 | 12.1 | 2.8 | 1.0 | - | 11.6 |
| M449()()(103) | 0.7 | 0.2 | 1.1 | 9.6 | 0.9 | 0.2 | 1.8 | 10.5 | 1.0 | 0.2 | - | 8.8 |
| M450()()(105) | 2.8 | 0.6 | 7.2 | 18.6 | 4.1 | 0.6 | 5.9 | 18.4 | 4.3 | 0.7 | - | 12.9 |
| M451()()(108) | 1.3 | 0.2 | 7.1 | 16.4 | 1.6 | 0.3 | 11.1 | 20.6 | 1.8 | 0.3 | - | 9.7 |
| M452()()(115) | 1.4 | 0.4 | 2.9 | 12.6 | 2.2 | 0.5 | 3.6 | 14.0 | 2.0 | 0.5 | - | 10.3 |
| M453()()(118) | 3.9 | 1.6 | 1.0 | 14.7 | 4.0 | 1.7 | 0.6 | 14.1 | 3.8 | 2.2 | - | 13.9 |
| M454()()(133) | 1.2 | 0.4 | 2.1 | 11.5 | 1.8 | 0.4 | 2.6 | 12.5 | 1.6 | 0.5 | - | 9.8 |
| M455()()(137) | 2.0 | 0.6 | 4.0 | 14.3 | 3.1 | 0.6 | 4.3 | 15.7 | 2.9 | 0.7 | - | 11.4 |
| M456()()(138) | 1.5 | 0.3 | 11.7 | 21.3 | 1.8 | 0.3 | 9.4 | 19.2 | 2.0 | 0.4 | - | 10.0 |
| M457()()(140) | 1.0 | 0.3 | 1.9 | 10.9 | 1.4 | 0.3 | 2.2 | 11.6 | 1.3 | 0.4 | - | 9.4 |
| M458()()(167) | 3.8 | 1.5 | 1.0 | 14.5 | 3.9 | 1.6 | 0.6 | 13.9 | 3.8 | 2.1 | - | 13.7 |
| M459()()(169) | 1.8 | 0.5 | 3.6 | 13.7 | 2.8 | 0.5 | 4.0 | 15.1 | 2.6 | 0.6 | - | 11.0 |
| M460()()(179) | 0.9 | 0.3 | 1.4 | 10.3 | 1.2 | 0.3 | 1.6 | 10.8 | 1.2 | 0.3 | - | 9.2 |
| M461()()(180) | 1.7 | 0.3 | 9.1 | 19.0 | 2.0 | 0.4 | 4.0 | 14.0 | 2.2 | 0.4 | - | 10.3 |
| M462()()(262) | 1.7 | 1.1 | 0.5 | 11.2 | 1.8 | 1.2 | 0.3 | 11.0 | 1.7 | 1.5 | - | 11.0 |
| M463()()(269) | 0.9 | 0.3 | 1.5 | 10.4 | 1.2 | 0.3 | 1.7 | 10.8 | 1.2 | 0.3 | - | 9.2 |
| M464()()(289) | 1.9 | 1.5 | 0.4 | 11.8 | 1.9 | 1.7 | 0.3 | 11.7 | 1.8 | 2.1 | - | 11.8 |
| M465()()(15B) | 2.2 | 0.4 | 11.0 | 21.6 | 3.2 | 0.5 | 10.5 | 21.9 | 3.3 | 0.6 | - | 11.6 |
| M466()()(269A) | 0.8 | 0.3 | 1.4 | 10.1 | 1.1 | 0.3 | 1.5 | 10.6 | 1.1 | 0.3 | - | 9.1 |
| M467()()(269B) | 0.8 | 0.3 | 1.3 | 10.0 | 1.1 | 0.3 | 1.4 | 10.4 | 1.1 | 0.3 | - | 9.1 |
| M468()()(33A) | 2.2 | 0.5 | 6.1 | 16.7 | 2.5 | 0.5 | 1.9 | 12.6 | 2.7 | 0.7 | - | 11.1 |
| M469()()(33B) | 2.3 | 0.5 | 9.0 | 19.7 | 2.6 | 0.5 | 2.1 | 12.9 | 2.8 | 0.6 | - | 11.2 |

| Receptor ID<br>P = Private<br>M =Mine owned<br>Respectively<br>(MAC)(Ben)(Man) | Incremental impact | | | Total impact | Incremental impact | | | Total impact | Incremental impact | | | Total impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | | Mt Arthur | Bengalla | Mangoola | |
| | Air quality criteria - 30µg/m³ | | | | | | | | | | | |
| | Scenario 1 | | | | Scenario 2 | | | | Scenario 3 | | | |
| M470()()(33C) | 2.6 | 0.5 | 9.0 | 20.1 | 2.9 | 0.6 | 1.9 | 13.2 | 3.2 | 0.7 | - | 11.6 |
| M471()()(33E) | 2.3 | 0.4 | **45.6** | **56.2** | 2.7 | 0.4 | 4.2 | 15.0 | 3.0 | 0.5 | - | 11.3 |
| M472()()(33F) | 1.4 | 0.4 | 3.1 | 12.7 | 2.1 | 0.4 | 3.9 | 14.2 | 1.9 | 0.5 | - | 10.2 |
| M473()()(33G) | 3.7 | 0.6 | 9.7 | 22.0 | 4.3 | 0.6 | 3.5 | 16.1 | 4.7 | 0.8 | - | 13.3 |
| M474()()(33H) | 1.4 | 0.3 | 13.7 | 23.1 | 2.0 | 0.3 | **84.6** | **94.6** | 2.1 | 0.3 | - | 10.1 |
| M475()()(33I) | 1.8 | 0.4 | 10.1 | 20.1 | 2.1 | 0.4 | 3.9 | 14.1 | 2.3 | 0.5 | - | 10.5 |
| M476()()(33K) | 1.6 | 0.3 | 19.6 | 29.3 | 2.1 | 0.3 | 16.1 | 26.1 | 2.2 | 0.4 | - | 10.3 |
| M477()()(33M) | 1.0 | 0.3 | 2.0 | 11.1 | 1.5 | 0.3 | 2.5 | 12.1 | 1.4 | 0.4 | - | 9.5 |
| M478()()(45A) | 1.7 | 0.3 | 14.1 | 24.1 | 2.1 | 0.4 | 5.4 | 15.5 | 2.3 | 0.4 | - | 10.4 |
| M479()()(45B) | 1.4 | 0.3 | 10.7 | 20.2 | 1.8 | 0.3 | 7.2 | 17.0 | 1.9 | 0.4 | - | 10.0 |
| M480()()(59B) | 1.2 | 0.2 | 5.1 | 14.3 | 1.7 | 0.2 | 11.5 | 21.1 | 1.8 | 0.3 | - | 9.7 |
| M481()()(75A) | 3.8 | 1.7 | 0.9 | 14.5 | 3.9 | 1.8 | 0.5 | 14.0 | 3.7 | 2.4 | - | 14.0 |
| M482()()(87A) | 1.7 | 0.3 | 10.1 | 20.0 | 2.1 | 0.4 | 4.2 | 14.3 | 2.2 | 0.5 | - | 10.4 |
| M483()()(87B) | 1.6 | 0.3 | 9.0 | 18.7 | 1.9 | 0.4 | 4.0 | 14.0 | 2.1 | 0.4 | - | 10.2 |
| M484()()(96A) | 5.3 | 1.9 | 1.1 | 16.5 | 5.3 | 1.9 | 0.6 | 15.8 | 5.0 | 2.7 | - | 15.6 |
| P485()()(66) | 2.2 | 1.4 | 0.5 | 12.2 | 2.3 | 1.6 | 0.3 | 12.0 | 2.2 | 2.0 | - | 12.0 |