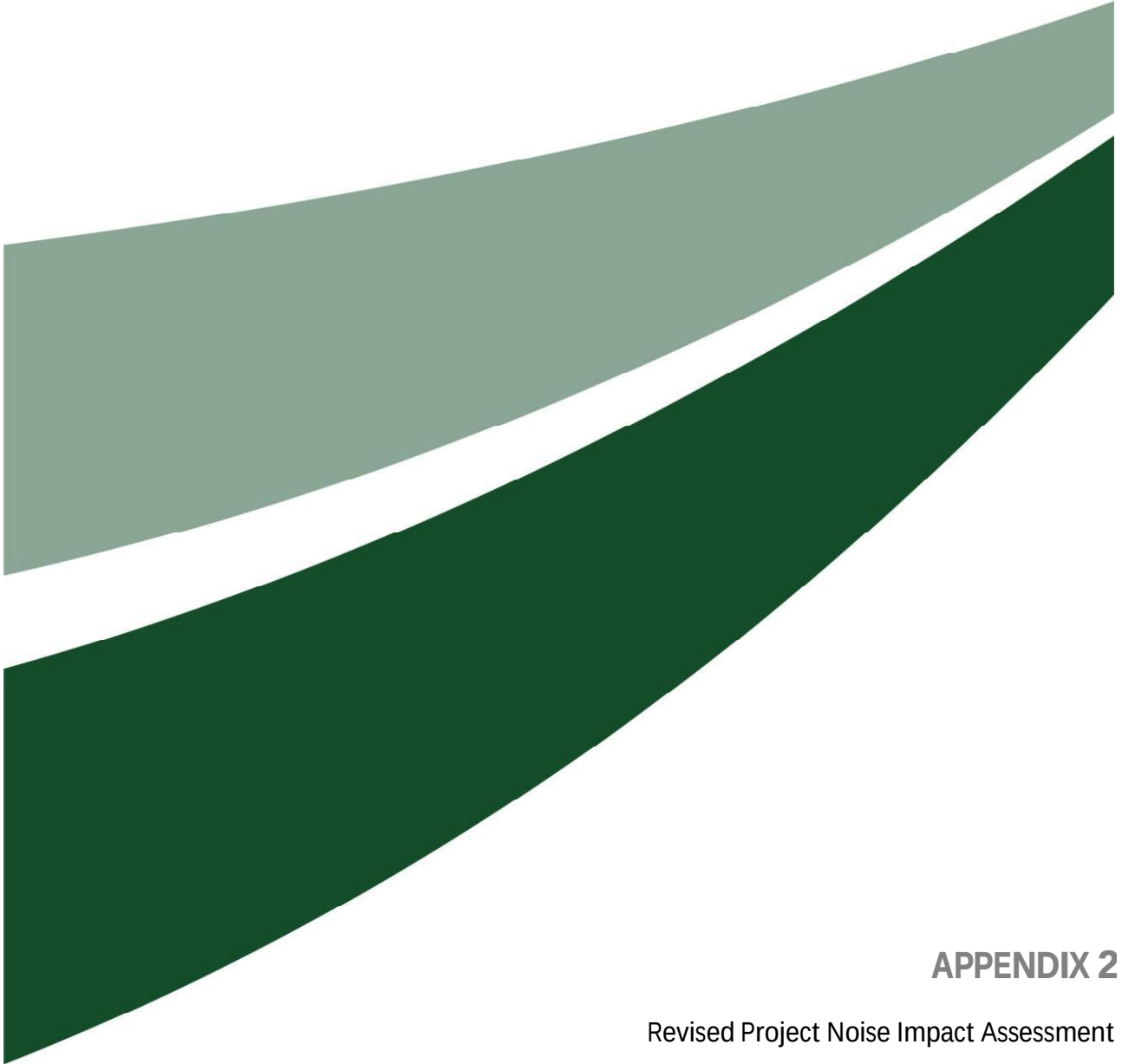




APPENDIX 2

Revised Project Noise Impact Assessment

30 August, 2013

Umwelt Australia
PO Box 3024
Teralba NSW 2284
Attention: David Holmes

Dear David,

Regarding: Bulga Optimisation Project - Revised Project

1 INTRODUCTION

Bulga Coal Management (BCM) submitted a development application to NSW Department of Planning and Infrastructure (DP&I) for the Bulga Optimisation Project (the Project) in April 2013. Umwelt (Australia) Pty Limited prepared an Environmental Impact Statement (EIS) titled *Environmental Impact Statement, Bulga Optimisation Project* (Umwelt 2013). Appendix 6 of the EIS contained a Noise Impact Assessment (NIA) prepared by Global Acoustics titled *Bulga Optimisation Project, Environmental Noise Assessment* (Global Acoustics 2013) (the EIS NIA).

BCM have subsequently developed a revised operational plan for the Project. This letter outlines results of an additional NIA undertaken to assess potential noise impacts associated with the revised operational plan (the Revised Project).

The key features and elements of the Revised Project are unchanged from the original Project as described in the EIS, however, changes have been made to some aspects of the Project. Significant changes for the Revised Project relative to the EIS NIA include:

- ❑ Modified shape and location of the Noise and Visual Bund.
- ❑ Modified sequencing of the Noise and Visual Bund; the northernmost section is to be emplaced first.
- ❑ Modified position of the northern end of the Noise and Visual Bund. The western toe is now to be located east of Charlton Road. Realignment of Charlton Road is no longer required.
- ❑ Modified timing of construction of the Eastern Emplacement Area (EEA). Worst case noise impacts from overburden emplacement at the EEA are now predicted during Year 4 of the Revised Project, compared with approximately Year 7 in the

EIS NIA.

- ❑ Modified locations for underground ventilation fans. These will now be relocated to a position at the top of the Whybrow Highwall rather than a location in the Blakefield North boxcut.
- ❑ Blakefield North development coal will now utilise the existing Blakefield South conveyor system, and will exit the underground at the Blakefield South stockpile. Coal flow to the CHPP from that point will be as for existing Blakefield South operations. The EIS NIA considered trucking of development coal from the Blakefield North mine entry to the CHPP.
- ❑ Coal from the Bulga Underground Operations which is brought to the surface in the open cut workings will be hauled via truck rather than the originally proposed overland conveyor. .
- ❑ A vertical temperature gradient of four degrees Celsius per 100 metres was used for all temperature inversion meteorological conditions, in place of three degrees Celsius per 100 metres as this is now required by the EPA for modelling stability class F.
- ❑ Sound power for Caterpillar 797F XQ rear dump trucks was revised (increased) to use updated test data measured during January and February 2013.
- ❑ The mobile plant fleet was modified to reflect the requirements of the revised operational plan.
- ❑ Receptor 151 (Lewis) has been acquired by BCM. This receptor was omitted from the Revised Project assessment.
- ❑ The shape of the EEA has been modified such that the Stage 1 Mushroom Composting Facility located east of the EEA is retained. An Occupational Health and Safety (OH&S) assessment has been undertaken to assess potential noise impact to workers at this facility.

A full description of the Revised Project is contained in the Response to Submissions and Revised and Amended Project Report. The key features of the Revised Project are shown in Figure 1.

This NIA considers operational noise, construction noise, low frequency noise, cumulative noise, and sleep disturbance associated with the Revised Project.

There will be no increase to rail movements or rail noise associated with the Revised Project; rail noise is not discussed further and remains as per the findings in the EIS.

Figure 2 illustrates the locations of assessed noise sensitive receptors.

Section 2 of the EIS NIA outlines criteria applicable to the Project. The same criteria are applicable to the Revised Project.

2 METHODOLOGY

Five staged operational noise scenarios were modelled representing the progression of mining operations over the proposed life of mine. Each stage modelled represents reasonable and feasible worst case operating conditions for each stage. The stages are referred to as Year 1, Year 4, Year 7, Year 13 and Year 19 (nominally, years 2014, 2017, 2020, 2026 and 2032 for assessment purposes).

One construction noise scenario was modelled to assess a worst-case construction noise scenario.

Further detail regarding the operating scenarios is provided in Section 3.2.

2.1 Noise Modelling Assessment

Noise levels were predicted using RTA Technology's Environmental Noise Model (ENM), a computer based environmental noise model, to determine the acoustic impact of mining and construction activities. The model takes into account geometric spreading, atmospheric absorption, and, barrier and ground attenuation. ENM Terrain Category 2, representing a rural land environment, was adopted for model input.

Results were determined using the cumulative distribution of results methodology. The methodology is described in detail in Section 3.1 of the EIS NIA.

2.2 Noise Contours

Noise contours were determined over assessment areas containing private residences to provide a visual representation of the model results. It should be noted that noise contours are based on interpolation of results determined for individual points, and as such are indicative, and are presented for illustrative purposes only. The exception is vacant lots, for which a sufficiently dense grid of points was modelled over the lot area to provide a representative assessment of impact for use in the 25 percent area affectation assessment.

2.3 INP Modifying Factors

As described in Section 3.3 of the EIS NIA, low frequency noise (LFN) is the only noise characteristic that may draw a modifying factor penalty in accordance with NSW Industrial Noise Policy (EPA 2000) (INP) guidelines.

Section 3.3 of the EIS NIA outlines criteria for two methods of assessing LFN; the Broner method and the INP method. Both methods are considered in this assessment. A variation to the INP method is discussed in Section 4.6 of this letter.

2.4 Cumulative Noise Assessment

Cumulative noise was assessed in the EIS NIA through combining predictions for the Project with predictions for the Mount Thorley Warkworth mine complex (MTW). Refer to Section 3.4.2 of the EIS NIA for a complete description of the methodology adopted for assessment of cumulative noise.

An environmental assessment (EA) of the proposed Warkworth Extension titled '*Mount Thorley Warkworth Operations – Proposed Warkworth Extension Acoustic Assessment*', (EMM April 2010) (Warkworth Extension EA) was used for MTW predictions. The Warkworth Extension approval was overturned in the NSW Land and Environment Court in April 2013. However; this decision is currently subject to challenge and noise impacts of the Warkworth Extension have therefore been included in the cumulative assessment as a worst-case.

Cumulative noise results are presented in Section 4.5.

2.5 Sleep Disturbance

Refer to Section 3.5 of the EIS NIA for details of the methodology adopted for assessment of sleep disturbance.

2.6 Road Traffic Noise

Sections 2.7, 3.6 and 5.7 of the EIS NIA present criteria, methodology and results for assessment of road traffic noise. Road traffic noise results for Charlton Road presented in Table 5.8 of the EIS NIA are no longer applicable, as realignment of Charlton Road is no longer required. There is no increased road traffic noise associated with the Revised Project; road traffic noise is not discussed further.

3 NOISE MODEL PARAMETERS

3.1 Meteorology

Meteorological conditions assessed for the Revised Project were generally the same as for the EIS NIA, with one exception. For the Revised Project, a vertical temperature gradient of 4 degrees Celsius per 100 metres elevation was modelled for stability class F rather than 3 degrees Celsius per 100 metres.

3.2 Mining Scenarios

Five primary operating stages were modelled representing the various stages of development throughout the life of mine. The stages are referred to as Year 1, Year 4, Year 7, Year 13 and Year 19. Years 1, 4, 7 and 13 stages were each divided into two secondary scenarios, representing day and evening/night operation. Plant quantities are generally the same for day and evening/night scenarios, however, overburden haulage and emplacement is modelled in more shielded locations in evening/night scenarios. A number of refinements were made for each mine plan scenario to determine the most efficient mine plan layout with regard to managing noise emissions, including assessing the effectiveness of the proposed Noise and Visual Bund. Further details of proposed noise mitigation measures are provided in Section 3.4. In essence, the five stages represent the following:

- ❑ Year 1 – Commence development of the Noise and Visual Bund. The northern end of the Noise and Visual Bund is established first;
- ❑ Year 4 – The outer edges of the Noise and Visual Bund largely completed, development of the Eastern Emplacement Area (EEA) underway. Worst case emplacement scenario for EEA;
- ❑ Year 7 - Worst-case emplacement scenario for northern Main Pit area. Emplacement continues in southern portions of EEA. The life of the dragline has been extended relative to the EIS NIA, and it still considered operational at this stage for the Revised Project;
- ❑ Year 13 - Operations largely located in pit with final emplacement behind the Noise and Visual Bund, emplacement complete in EEA; and
- ❑ Year 19 - In-pit emplacement only, mining focused on the South Pit area. The Year 19 scenario is considered representative of operations through to Year 22 (life of mine).

All known major noise sources for the BCC, including the open cut and underground mine, and CHPP, were included in all model scenarios. All plant (other than locomotives which were modelled as idling on the rail loop) was modelled at maximum sound power, and assumes all plant operates continuously and simultaneously. In reality, this rarely occurs; as such, modelled results are considered conservative. An availability and utilisation rate of 85 percent was applied to the haul truck and ancillary equipment fleet.

100 percent availability and utilisation of excavators, loaders and shovels was modelled.

Bulga Surface Operations and Bulga Underground Operations operate under separate development consents. Despite this, it is understood the expectation of the regulators, and the goal for BCM, is for the BCC as a whole to comply with noise criteria contained in each of the relevant development consents. To demonstrate that BCM is capable of achieving this, all currently approved, and proposed Bulga Underground Operations operational noise sources (including the 8 - 4MW gas fired power generators at the 32 MW power generation site proposed as part of the Blakefield North Underground modification) and CHPP infrastructure scheduled to operate concurrently with the Project, have been included in all operating scenarios.

BCM has advised that gas flares and compressors do not operate simultaneously at any given location. As gas flares represent the worst case with regards to noise emission, they were included in model scenarios, while compressors were not.

Assumed modifications to Bulga Underground infrastructure for the Revised Project scenarios relative to the EIS NIA include:

- ❑ Coal from Blakefield North underground will come to the surface via the existing underground system, delivering coal to the Blakefield South Stockpile, which in turn transports coal via conveyor to the BCC CHPP and coal stockpiles area. Coal from Underground operations, following Blakefield seam extraction, will exit the underground from a portal within the open cut pit. This coal will be transported by truck to the BCC coal handling facilities. These scenarios have been modelled in the revised Noise Impact Assessment, as the original EIS NIA considered the development of an overland conveyor from the open cut pit for transport of coal from the Underground operations for the Blakefield North operations and the seams beyond.
- ❑ Underground ventilation fans would relocate from existing locations to the Whybrow highwall in approximately years 4 and 7 to service underground mining requirements. This represents a change from the EIS NIA which considered these facilities relocated to within the open cut pit during the life of the operations.

Other Underground infrastructure is consistent with the EIS NIA. CHPP infrastructure for the Revised Project scenarios was the same as in the EIS NIA.

Table 3.1 to Table 3.3 lists representative typical plant type and quantities included in each model stage. Plant types and numbers are representative of plant that are likely to be used for the Project however actual numbers and equipment type will vary to suit operational needs. Figures C.1 to C.9 in Appendix C show modelled plant locations, roadside noise bund locations, and pit shell topography.

Table 3.1 OPEN CUT PLANT ITEMS INCLUDED IN MODELS

Description	Plant Quantities				
	Year 1	Year 4	Year 7	Year 13	Year 19
Hitachi EX2500 excavator	0	1	1	0	0
Hitachi EX3600 excavator	1	1	2	2	2
Hitachi EX5500 excavator	2	1	1	1	0
Hitachi EX5600 excavator	1	1	1	1	1
Hitachi EX8000 excavator	1	1	0	0	0
Hitachi EX8000 excavator replacement	0	0	1	1	1
P&H 4100XPC shovel	1	1	1	1	0
P&H 9020 dragline	1	1	1	0	0
Le Tourneau 1850 front end loader	1	1	1	1	1
Komatsu WA900 front end loader	1	1	1	1	1
CAT 834H rubber tyre dozer or similar	1	2	1	1	0
Caterpillar D11R dozer	12	8	9	8	5
Caterpillar D10T dozer	1	4	5	4	4
Caterpillar 789C XQ rear dump truck	9	11	11	9	14
Caterpillar 793D XQ rear dump truck	28	30	31	25	16
Caterpillar 797F XQ rear dump truck	7	8	8	8	0
Caterpillar 789C XQ water truck	3	3	3	3	2
Caterpillar 16H/16M grader	3	2	2	3	2
Caterpillar 24H/24M grader	1	2	2	1	0
Terex SKSw75 drill	3	3	3	3	2

Note: 1. Table shows representative typical plant to allow for assessment.

Table 3.2 UNDERGROUND PLANT ITEMS INCLUDED IN MODELS

Description	Plant Quantities				
	Year 1	Year 4	Year 7	Year 13	Year 19
Goaf extraction units ¹	4	4	4	4	4
Flares with goaf extraction units ^{1,3}	3	0	0	0	0
Gas compressor with goaf extraction units ^{1,3}	1	0	0	0	0
Gas compressor at Whybrow Highwall location ^{2,3}	0	1	1	1	1
Flares at Whybrow Highwall location ^{2,3}	0	3	3	3	3
3 MW Power generators (at approved 25 MW power generation site)	3	3	3	3	3
Flares (at approved 25 MW power generation site)	4	4	4	4	4
4 MW Power generators (at proposed 32 MW power generation site)	0	8	8	8	8
Flares (at proposed 32 MW power generation site)	0	3	3	3	3
Underground ventilation fans (set of 3)	2	2	2	2	2
Underground drift conveyor (Blakefield South)	1	1	1	0	0
Underground drift conveyor drives (set of three)	1	1	1	0	0
Overland conveyor to CHPP (CV2206)	1	1	1	0	0
Overland conveyor drive (for CV2206)	1	1	1	0	0
Underground reclaim conveyor (Blakefield South stockpile to overland conveyor)	1	1	1	0	0
Sizing station at east end of underground reclaim conveyor	1	1	1	0	0
Reclaim conveyor drive	1	1	1	0	0
992 front end loader	0	0	1	1	1
Underground coal rear dump trucks	0	0	3	4	4

Note: 1. Goaf extraction units relocate to Whybrow Highwall from Broke Road location by Year 7;
2. Compressor and flares relocate to Whybrow Highwall location by Year 4; and
3. Compressor and flares do not operate simultaneously. Flares were modelled as worst case.

Table 3.3 CHPP PLANT ITEMS INCLUDED IN MODELS (all stages)

Description	Quantity
Washery building	1
Stockpile dozers	3
Locomotives on rail loop (idle)	3
Reject bin	1
Rail load out bin	1
ROM conveyor	1
Reject conveyor	1
Overland to CHPP conveyor	1
CHPP clean coal conveyor	1
Skyline conveyors	2
Rail load out conveyor	1
Transfer stations	5

3.3 Construction Scenario

On site construction tasks are unchanged from the EIS NIA. There is no further consideration of these tasks for the Revised Project.

The Charlton Road realignment as assessed in the EIS NIA is no longer required as the outer toe of the Noise and Visual Bund is now located to the east of Charlton Road. Realignment of a segment of Broke Road is still required.

One construction noise scenario was assessed representing worst-case construction noise impact, which would occur during Year 1 of the Revised Project. The scenario considered construction of the Broke Road realignment. Plant quantities and locations were as per the EIS NIA.

Development of the out of pit Noise and Visual Bund would occur during the same period; however, this development is considered part of regular operations and is assessed against project specific noise criteria rather than construction noise criteria. Predictions for the construction noise scenario were combined with predictions from the Year 1 mining scenario, which includes noise and visual bund development, to provide an assessment of total BCC noise emissions during this period.

Plant included in the construction noise scenario is listed in Table 3.4. Modelled source locations are shown in Figure C.1 in Appendix C.

As discussed in the EIS NIA, other construction tasks are required for Bulga Underground

Operations, including installation of gas drainage infrastructure, a small-scale power generation facility and associated infrastructure, and relocation of ventilation fans. Of these tasks, civil works, and goaf and vertical gas drilling associated with installation of gas drainage infrastructure were identified as the primary activities with potential to cause noise impact. Approval for these construction tasks is being sought under the Blakefield North Underground modification. Further assessment of drilling and civil works construction was undertaken as part of the Response to Submissions to this modification application. Approval for these tasks is still pending.

Table 3.4 CONSTRUCTION PLANT ITEMS INCLUDED IN MODEL

Description	Quantity
Dozer (D7 or similar)	3
Dump Truck (40t)	4
Excavator (60t)	1
Roller	4
Scraper	2
Water Cart	3
Crusher	1

Sound power for construction plant was based on reasonable and feasible levels for plant commonly used for similar applications in the Hunter Valley. A 6 metre high acoustic barrier was modelled on the south and west sides of the crusher.

3.4 Noise Control Measures

The following noise control measures were incorporated into the assessment:

- ❑ A Noise and Visual Bund is to be constructed progressively around the western extent of the site to approximately RL150 metres AHD. Each modelled stage incorporates the extent of the bund as a barrier, as appropriate at that point in time;
- ❑ BCM operate a noise attenuated mobile fleet. Sound powers used in modelling were based on “in-service” attenuated levels that are achievable and maintainable;
- ❑ BCM has installed a hydraulic snubber on the dipper door (gate) of the shovel bucket to reduce impact noise often caused by the gate slamming shut, which is often associated with sleep disturbance. BCM will retain the hydraulic snubber so this noise source will not be a cause of sleep disturbance
- ❑ Day and night scenarios were developed for some stages. Day scenarios consider overburden emplacement in more exposed areas, such as construction of the outer face of the noise and visual bund, and establishment of the Eastern Emplacement

Area. Evening/night scenarios consider overburden emplacement in more shielded locations such as in pit, and behind dumps constructed during the day period where appropriate. BCM considers all scenarios to be reasonable and feasible in terms of achieving a viable mining operation;

- ❑ Five metre high roadside bunds were typically included to all haul roads above RL80, and to selected exposed haul roads below RL80. Modelled bund locations are shown in Figures B.1 to B.9 in Appendix B;
- ❑ A 6 metre high acoustic barrier was modelled on the south and west sides of the road base crusher used for construction material;
- ❑ Ten metre high earth bunds were modelled on three sides of the ventilation fans at the relocated position on top of the Whybrow Highwall from Year 7 onwards;
- ❑ The Hitachi EX8000 replacement excavator included a limiting sound power of L_W/L_{WA} 124/118 dB from Year 7 onwards. This excavator is to be used preferentially for operation close to the surface in South Pit when required; and
- ❑ Haul roads to out of pit emplacement areas such as the Noise and Visual Bund were strategically located to obtain beneficial topographical shielding from already constructed emplacement areas.

3.5 Plant Sound Power

Sound power data used in this assessment was primarily the same as for the EIS with the following exceptions:

- ❑ A revised sound power was used for Caterpillar 797F XQ rear dump trucks. Measured data was not available at the time of the EIS assessment. Global Acoustics subsequently measured six trucks on site at the BCC during January and February 2013; data obtained during this testing program was used for this assessment.
- ❑ The Hitachi EX8000 excavator is due for replacement at approximately Year 7 of the Revised Project. An excavator with similar capabilities to a Hitachi EX5600 will be required to operate close to the surface in South Pit around this time. The replacement excavator is to have a lower sound power specified than the current EX5600 excavator. A sound power based on excavators operating on other sites that have similar functionality and lower sound power levels was adopted for the replacement excavator from Year 7 onwards. BCM will include this sound power level as a specification in tender documents for the replacement excavator.
- ❑ A Hitachi EX5500 is to be replaced with an EX2500 or similar size excavator. Sound power for the replacement excavator was conservatively based on the sound power for a Hitachi EX3600.

Table 3.5 lists sound power data for plant items that have a different sound power to the EIS.

Table 3.5 SOUND POWER DATA

Description	Octave Band Sound Power Spectrum, L_{eq} dB								Total L_{eq} dB	
	63	125	250	500	1k	2k	4k	8k	Lin	A wt
Hitachi EX8000 excavator replacement	114	119	118	116	113	110	105	101	124	118
Hitachi EX2500 excavator	116	120	119	115	112	110	105	101	124	118
Caterpillar 797F XQ rear dump truck	120	119	117	114	111	108	103	105	124	117

4 RESULTS

4.1 Operational Noise Results

Table 4.1 presents 90th percentile operational noise results for modelled receptors where an exceedance of PSNC is predicted for any stage. Results in bold type exceed the PSNC of $L_{Aeq,15\text{minute}}$ 35 dB. Bracketed results indicate predicted change relative to the EIS NIA.

Table 4.2 presents 90th percentile operational noise results for receptors that were previously included in the management zone based on EIS NIA predictions, but are now omitted. The majority have a 1 dB predicted reduction relative to the EIS NIA for the worst stage.

Predicted results for all private receptor locations included in the assessment are presented in Appendix A, Table A.1. There are no results in this assessment for EIS NIA receptor 307 as this is now owned by another mining company.

Figure 3 shows indicative $L_{Aeq,15\text{minute}}$ 35 dB noise contours for each stage, and, the maximum extent noise contour resulting for all assessed stages. Noise contours for each individual stage are presented in Appendix D.

BCM proposes to emplace overburden on the outer face of the Noise and Visual Bund only during dayshift. Dayshift at BCM is from 7am to 7pm, which is one hour longer than the INP day period (defined as 7am to 6pm); the one-hour period from 6pm to 7pm encroaches into the evening period. Predictions in Table 4.1 for the evening period are based on an operational scenario that does not consider overburden emplacement on the outer face of the Noise and Visual Bund, as for the majority of the evening period (the more sensitive portion), this would not be the case. During certain months, the frequency of elevated noise levels may be higher during this one-hour period than during the day due to a higher probability of enhancing wind conditions in the evening period. BCM is aware of the need to carefully manage noise emissions during this transitional period, and to progressively modify, alter or shut down operations as required in order to comply with criteria.

Noise Management Zone

Model results in Table 4.1 indicate that forty-six receptors are predicted to experience exceedance of PSNC at some stage during the life of the Project, and as such, are categorised into the noise management zone. This is an increase of four receptors relative to the EIS NIA. Of these:

- Forty-two receptors have minor exceedances of 1 to 2 dB above PSNC;
- Three receptors have moderate exceedances of 3 to 5 dB above PSNC; and

- One receptor has a significant exceedance of more than 5 dB above PSNC.

Receptor 1A (Hedley) has a prediction of $L_{Aeq,15\text{minute}}$ 38 dB during the evening and night periods in Year 4. This receptor has a criterion of $L_{Aeq,15\text{minute}}$ 37 dB under the current Open Cut Consent, and is therefore an additional receptor to the management zone as a result of the Revised Project. This receptor has acquisition rights with Mount Thorley Warkworth mine.

Receptor 8 (Marland) has a prediction of $L_{Aeq,15\text{minute}}$ 38 dB during the evening and night periods in Year 4. This receptor has a criterion of $L_{Aeq,15\text{minute}}$ 39 dB under the current Open Cut Consent, and is entitled to additional noise mitigation measures upon written request from the landowner. Rights for noise mitigation and management would continue to be available to this receptor. Receptor 97 (Lambkin) has a prediction of $L_{Aeq,15\text{minute}}$ 38 dB during the evening period in Year 1. This receptor has a criterion of $L_{Aeq,15\text{minute}}$ 36 dB under the current Open Cut Consent, and is therefore an additional receptor to the management zone as a result of the Revised Project.

Receptor 149 (McInerney) has predictions up to $L_{Aeq,15\text{minute}}$ 42 dB; it is noted that this receptor currently has acquisition rights under the current Open Cut Consent, and the owner of this property has a private agreement with BCM to allow higher noise levels; offers from BCM to purchase this property have been declined. BCM will continue to offer acquisition rights to this property owner.

Table 4.1 OPERATIONAL NOISE LEVELS FOR RECEPTORS IN MANAGEMENT ZONE - L_{Aeq}, 15minute dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19			Max All Years		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
1A	Hedley	33 (1)	35 (1)	35 (0)	36 (2)	38 (3)	38 (2)	33 (-1)	35 (-1)	35 (-1)	29 (-1)	32 (1)	32 (1)	27 (-2)	30 (-2)	30 (-2)	36 (2)	38 (2)	38 (2)
1B	Cant	34 (0)	36 (0)	36 (1)	31 (-2)	35 (-1)	34 (-1)	33 (4)	35 (-2)	35 (-1)	31 (-2)	34 (-1)	34 (0)	27 (-1)	30 (0)	30 (0)	34 (0)	36 (-1)	36 (0)
8	Marland	32 (0)	34 (0)	35 (0)	36 (4)	38 (4)	38 (3)	32 (-4)	34 (-3)	35 (-3)	27 (-6)	31 (-4)	32 (-4)	25 (-7)	30 (-5)	31 (-4)	36 (0)	38 (1)	38 (0)
94*	Rozene Pty Limited	34 (0)	36 (1)	35 (1)	32 (1)	35 (2)	34 (2)	32 (2)	35 (2)	34 (2)	30 (-1)	35 (2)	34 (2)	28 (-1)	32 (0)	31 (1)	34 (0)	36 (1)	35 (1)
95*	Rozene Pty Limited	34 (-1)	36 (1)	35 (1)	32 (0)	35 (1)	34 (2)	32 (1)	36 (3)	35 (3)	30 (0)	35 (2)	34 (2)	28 (-1)	32 (0)	31 (1)	34 (-1)	36 (1)	35 (1)
97	Lambkin	35 (0)	38 (2)	36 (2)	31 (0)	34 (1)	33 (1)	31 (0)	34 (1)	33 (1)	33 (3)	32 (0)	31 (0)	29 (0)	32 (0)	31 (1)	35 (0)	38 (2)	36 (2)
103*	Bell	34 (0)	36 (1)	35 (1)	32 (1)	35 (2)	34 (2)	32 (2)	35 (2)	34 (3)	30 (0)	34 (1)	33 (1)	28 (-1)	32 (0)	31 (1)	34 (0)	36 (1)	35 (1)
105A*	Bird and T Lambkin	33 (0)	36 (2)	34 (2)	31 (1)	34 (1)	33 (2)	32 (1)	35 (2)	33 (1)	32 (2)	35 (2)	33 (2)	29 (0)	32 (-1)	31 (1)	33 (0)	36 (2)	34 (2)
105C *	Bird and T Lambkin	33 (0)	36 (2)	34 (2)	31 (1)	34 (1)	33 (2)	32 (1)	35 (2)	33 (1)	32 (2)	35 (2)	33 (2)	29 (0)	32 (-1)	31 (1)	33 (0)	36 (2)	34 (2)
142A*	Ewen	34 (1)	35 (1)	33 (1)	30 (0)	32 (0)	31 (1)	32 (3)	34 (1)	32 (2)	30 (0)	36 (3)	33 (2)	27 (-1)	31 (-2)	29 (-1)	34 (1)	36 (2)	33 (1)
143B*	Lawson	33 (1)	35 (1)	33 (1)	31 (1)	34 (2)	32 (2)	33 (4)	35 (2)	33 (2)	31 (0)	36 (1)	34 (2)	28 (-1)	32 (-1)	30 (-1)	33 (1)	36 (1)	34 (2)
145*	Elsmore	34 (1)	36 (1)	34 (1)	31 (1)	32 (0)	31 (1)	32 (3)	33 (1)	32 (2)	30 (0)	34 (2)	32 (2)	27 (-1)	31 (0)	29 (0)	34 (1)	36 (1)	34 (1)
149	McInerney	42 (0)	42 (1)	41 (2)	35 (-1)	38 (0)	37 (1)	36 (2)	39 (2)	38 (3)	34 (0)	38 (0)	36 (1)	32 (-1)	36 (0)	34 (0)	42 (0)	42 (1)	41 (2)
164*	Sharrock	33 (0)	34 (1)	33 (1)	31 (2)	33 (2)	31 (1)	32 (3)	34 (1)	33 (2)	32 (1)	36 (3)	35 (4)	28 (-1)	31 (-2)	30 (-2)	33 (0)	36 (3)	35 (3)
165*	Garton	33 (1)	35 (1)	33 (1)	31 (1)	35 (3)	33 (3)	33 (4)	36 (3)	34 (3)	32 (0)	36 (1)	35 (3)	28 (-2)	32 (-1)	31 (-1)	33 (1)	36 (1)	35 (3)

Table 4.1 OPERATIONAL NOISE LEVELS FOR RECEPTORS IN MANAGEMENT ZONE - L_{Aeq}15minute dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19			Max All Years		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
179*	Brooks and Thompson	34 (0)	36 (2)	34 (1)	33 (3)	34 (2)	33 (2)	32 (2)	35 (2)	34 (2)	31 (0)	34 (1)	33 (1)	28 (-1)	31 (-3)	30 (-2)	34 (0)	36 (2)	34 (1)
195	Kennedy	35 (0)	34 (0)	34 (1)	32 (0)	34 (1)	33 (1)	32 (2)	34 (-2)	34 (0)	30 (0)	36 (3)	34 (2)	25 (0)	30 (-3)	29 (-3)	35 (0)	36 (0)	34 (0)
217s*	Russell	36 (2)	36 (1)	35 (1)	32 (-1)	33 (-1)	32 (-1)	32 (1)	34 (0)	34 (1)	32 (1)	36 (2)	36 (3)	26 (-1)	32 (-2)	31 (-3)	36 (2)	36 (1)	36 (2)
217m*	Russell	36 (1)	35 (1)	34 (1)	30 (-2)	32 (-1)	32 (0)	30 (0)	33 (1)	33 (1)	32 (3)	35 (2)	35 (3)	26 (-1)	32 (-1)	32 (-1)	36 (1)	35 (1)	35 (2)
217n*	Russell	37 (2)	37 (3)	36 (3)	31 (-3)	31 (-4)	31 (-1)	33 (4)	32 (-2)	32 (-1)	28 (-2)	35 (2)	34 (1)	22 (-4)	30 (-3)	29 (-3)	37 (2)	37 (2)	36 (3)
222	Vassallo	33 (0)	36 (1)	35 (0)	30 (-2)	34 (-1)	33 (-1)	32 (3)	34 (-2)	34 (-1)	31 (-1)	34 (0)	34 (0)	26 (-2)	30 (0)	30 (0)	33 (0)	36 (0)	35 (0)
226	Vassallo	34 (1)	36 (0)	36 (1)	31 (-2)	34 (-1)	34 (-1)	32 (3)	34 (-2)	34 (-1)	31 (-1)	34 (0)	34 (0)	26 (-2)	30 (0)	30 (0)	34 (1)	36 (0)	36 (1)
227*	Beavis	33 (0)	36 (1)	35 (0)	31 (-1)	34 (-1)	34 (0)	32 (3)	34 (-1)	34 (-1)	31 (-1)	34 (0)	34 (0)	26 (-2)	30 (0)	29 (-1)	33 (0)	36 (1)	35 (0)
228	Lamb	34 (1)	36 (0)	35 (0)	31 (-1)	34 (-1)	34 (0)	33 (4)	34 (-2)	34 (-1)	31 (-1)	34 (0)	34 (0)	26 (-2)	30 (0)	30 (0)	34 (1)	36 (0)	35 (0)
229	Ritchie	34 (1)	36 (1)	35 (0)	31 (-1)	34 (-1)	34 (0)	33 (4)	34 (-2)	34 (-1)	31 (-1)	34 (0)	34 (1)	27 (-1)	30 (0)	29 (-1)	34 (1)	36 (0)	35 (0)
230	Cant	34 (0)	37 (1)	36 (0)	32 (-1)	35 (-1)	35 (0)	34 (5)	35 (-2)	35 (-1)	32 (-1)	35 (0)	34 (0)	27 (-1)	30 (0)	30 (0)	34 (0)	37 (0)	36 (0)
231	Dawson	34 (1)	36 (0)	35 (0)	32 (-1)	35 (0)	35 (1)	33 (3)	34 (-2)	34 (-1)	31 (0)	34 (0)	34 (1)	27 (-1)	30 (0)	30 (0)	34 (1)	36 (0)	35 (0)
232	Medhurst	35 (1)	37 (0)	37 (1)	32 (-2)	36 (-1)	36 (0)	34 (4)	35 (-2)	35 (-1)	32 (0)	35 (1)	35 (1)	28 (0)	32 (1)	32 (1)	35 (1)	37 (0)	37 (1)
233	Vikas	35 (1)	36 (0)	36 (0)	32 (-1)	35 (-1)	35 (0)	34 (4)	35 (-2)	35 (-1)	32 (0)	35 (0)	34 (0)	27 (-1)	31 (0)	31 (0)	35 (1)	36 (-1)	36 (0)
234	Thompson	35 (1)	37 (1)	36 (0)	32 (-2)	36 (0)	35 (-1)	33 (2)	35 (-2)	34 (-2)	31 (-1)	35 (1)	34 (0)	27 (-1)	31 (0)	31 (0)	35 (1)	37 (0)	36 (0)
235	Caban	34 (0)	36 (0)	36 (1)	32 (-2)	35 (-1)	35 (0)	33 (1)	34 (-2)	34 (-1)	30 (-1)	34 (0)	34 (0)	27 (-1)	30 (0)	30 (0)	34 (0)	36 (0)	36 (1)
237	Ryan and Harrison	34 (0)	36 (0)	36 (0)	32 (-2)	36 (0)	36 (0)	33 (2)	34 (-2)	34 (-2)	31 (-1)	34 (0)	34 (0)	28 (0)	31 (1)	31 (0)	34 (0)	36 (0)	36 (0)
239	Waters	34 (0)	36 (0)	36 (0)	30 (-3)	33 (-2)	33 (-2)	31 (2)	32 (-4)	32 (-3)	30 (1)	33 (3)	33 (3)	24 (-2)	27 (-1)	27 (-1)	34 (0)	36 (0)	36 (0)

Table 4.1 OPERATIONAL NOISE LEVELS FOR RECEPTORS IN MANAGEMENT ZONE - L_{Aeq}15minute dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19			Max All Years		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
240	Godyn	34 (0)	36 (0)	36 (0)	31 (-3)	36 (0)	36 (0)	33 (2)	34 (-2)	34 (-2)	31 (-1)	34 (0)	34 (0)	28 (0)	31 (1)	31 (1)	34 (0)	36 (0)	36 (0)
241	Kaizer	33 (0)	36 (0)	35 (0)	31 (-2)	35 (0)	35 (0)	32 (1)	34 (-1)	34 (-1)	30 (-1)	33 (0)	33 (0)	27 (-1)	30 (0)	30 (0)	33 (0)	36 (0)	35 (0)
261	Smith	33 (0)	36 (0)	36 (0)	32 (-2)	36 (1)	36 (1)	33 (2)	34 (0)	34 (-1)	31 (-1)	34 (1)	34 (1)	27 (0)	30 (1)	30 (1)	33 (-1)	36 (0)	36 (0)
262	Smith	33 (0)	36 (0)	36 (0)	32 (-2)	36 (1)	36 (1)	33 (2)	34 (0)	34 (-1)	31 (-1)	33 (0)	33 (0)	27 (0)	30 (1)	30 (1)	33 (-1)	36 (0)	36 (0)
263	Reid	33 (0)	36 (0)	36 (0)	32 (-1)	36 (1)	36 (1)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (0)	33 (0)	27 (0)	30 (1)	30 (1)	33 (0)	36 (0)	36 (0)
264	Reid	33 (0)	36 (0)	36 (0)	32 (-1)	36 (1)	36 (1)	33 (2)	34 (-1)	34 (-1)	31 (-1)	33 (0)	33 (0)	27 (0)	30 (1)	30 (1)	33 (0)	36 (0)	36 (0)
265	Turnbull	33 (0)	35 (-1)	35 (0)	32 (-2)	36 (1)	36 (1)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (0)	33 (0)	27 (0)	29 (0)	29 (0)	33 (-1)	36 (0)	36 (1)
266	Hedley and Louis	33 (0)	35 (-1)	35 (0)	32 (-2)	36 (1)	36 (1)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (0)	27 (0)	29 (0)	29 (0)	33 (-1)	36 (0)	36 (1)
272	Bulga Community Centre Incorporated	33 (0)	35 (-1)	35 (-1)	32 (-2)	36 (1)	36 (1)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (0)	27 (0)	29 (0)	29 (0)	33 (-1)	36 (0)	36 (0)
323	Poulsen	31 (0)	33 (0)	34 (1)	35 (3)	37 (4)	37 (3)	33 (-2)	35 (-1)	35 (-1)	30 (-1)	31 (-2)	32 (-1)	29 (-2)	31 (-2)	32 (-1)	35 (0)	37 (1)	37 (1)
324*	Wood	28 (1)	31 (1)	32 (1)	33 (5)	35 (4)	36 (4)	30 (-3)	32 (-2)	33 (-1)	25 (-1)	28 (1)	29 (1)	23 (-3)	27 (-1)	28 (-1)	33 (0)	35 (1)	36 (2)
325	Ancich	31 (0)	33 (1)	34 (1)	34 (3)	36 (3)	37 (3)	31 (-3)	34 (-2)	35 (-1)	28 (-3)	31 (-2)	32 (-2)	25 (-6)	30 (-3)	31 (-3)	34 (0)	36 (0)	37 (1)

Note: 1. Receptor 149 currently has rights to acquisition upon request;

2. Bolded results denote predicted result exceeds PSNC; and

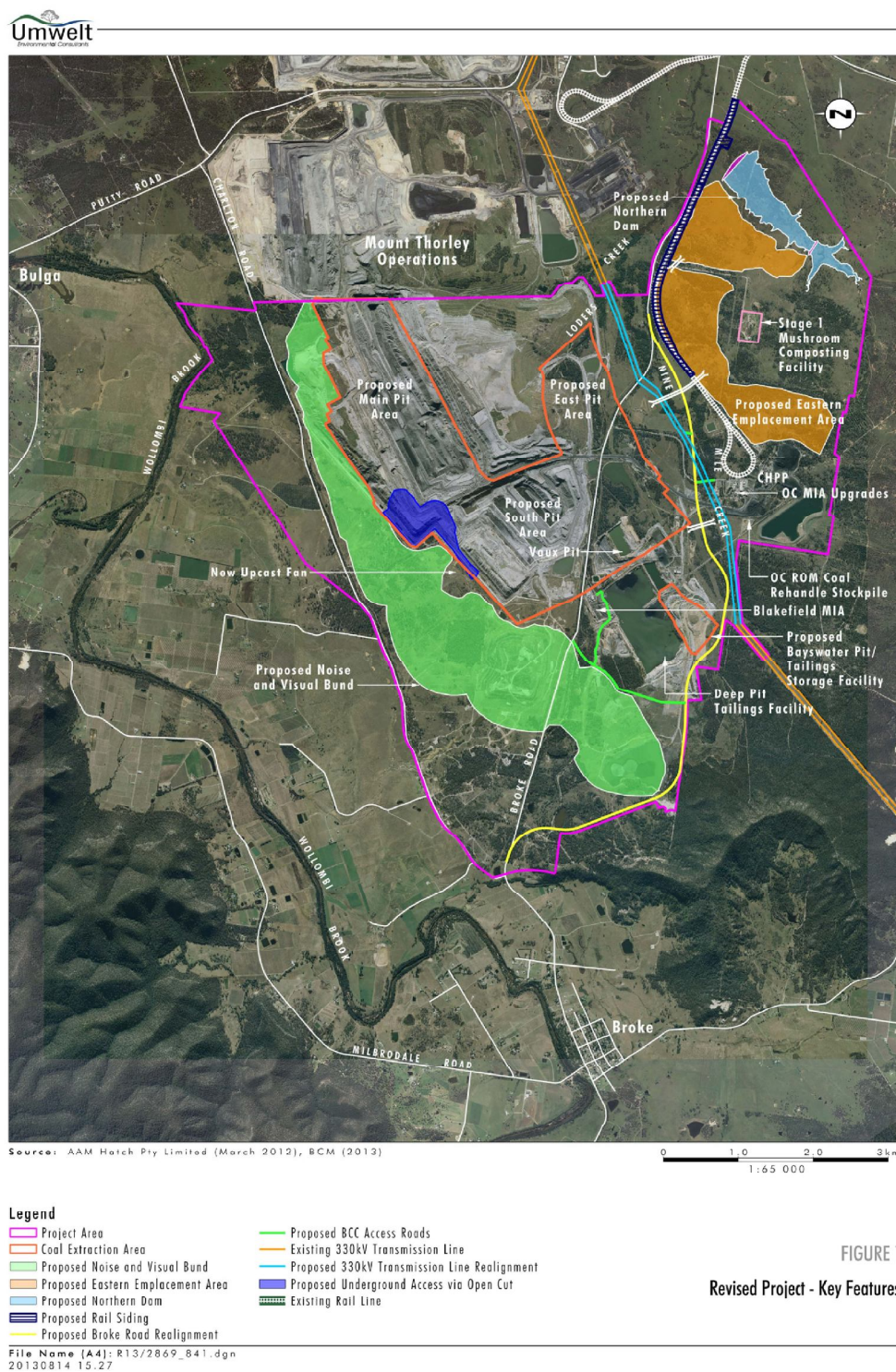
3. Bracketed results indicate change relative to EIS.

4. * denotes receptors new to management zone in this assessment (were not in this zone in EIS assessment results).

Table 4.2 RECEPTORS INCLUDED IN EIS MANAGEMENT ZONE, NOW OMITTED - L_{Aeq},15minute dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19			Max All Years		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
243	Neville	33 (0)	35 (-1)	35 (0)	31 (-1)	35 (1)	35 (1)	32 (1)	33 (-1)	33 (-1)	30 (-1)	33 (0)	33 (0)	27 (0)	30 (1)	30 (1)	33 (0)	35 (-1)	35 (0)
254	Mitchell	32 (0)	35 (-1)	35 (-1)	31 (-2)	35 (1)	35 (1)	32 (2)	33 (-1)	33 (-1)	30 (-1)	32 (0)	32 (0)	27 (0)	29 (0)	29 (0)	32 (-1)	35 (-1)	35 (-1)
256	Cameron	32 (0)	34 (-2)	34 (-2)	30 (-2)	34 (0)	34 (0)	31 (1)	33 (0)	33 (0)	30 (-1)	32 (1)	32 (0)	27 (1)	28 (0)	28 (0)	32 (0)	34 (-2)	34 (-2)
274	Messrs																		
	Dragicevic	33 (0)	35 (-1)	35 (-1)	32 (-2)	35 (0)	35 (0)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (1)	27 (0)	29 (0)	29 (0)	33 (-1)	35 (-1)	35 (-1)
276	Cooke	33 (0)	35 (-1)	35 (-1)	32 (-2)	35 (1)	35 (0)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (1)	26 (-1)	29 (0)	29 (0)	33 (-1)	35 (-1)	35 (-1)
279	Bendall	33 (0)	35 (-1)	35 (-1)	32 (-2)	35 (0)	35 (0)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (1)	27 (0)	29 (0)	29 (0)	33 (-1)	35 (-1)	35 (-1)
280	Magin	33 (1)	35 (-1)	35 (0)	32 (-2)	35 (0)	35 (0)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (1)	27 (0)	29 (0)	29 (0)	33 (-1)	35 (-1)	35 (0)
288	Ford	33 (1)	35 (-1)	35 (-1)	32 (-2)	35 (1)	35 (1)	32 (1)	34 (0)	34 (0)	30 (-2)	33 (1)	33 (1)	26 (-1)	29 (0)	29 (0)	33 (-1)	35 (-1)	35 (-1)
294	Brown	32 (0)	34 (-2)	34 (-1)	31 (-2)	34 (0)	34 (0)	31 (1)	33 (0)	33 (0)	30 (-1)	32 (1)	32 (0)	26 (0)	28 (0)	28 (0)	32 (-1)	34 (-2)	34 (-1)
308	Renaud	33 (0)	35 (-1)	35 (-1)	32 (-2)	35 (0)	35 (0)	32 (1)	35 (1)	35 (1)	30 (-1)	33 (1)	33 (1)	25 (-2)	30 (0)	30 (0)	33 (-1)	35 (-1)	35 (-1)
311	AGL Energy Limited	32 (-1)	34 (-2)	34 (-3)	31 (-2)	35 (1)	35 (1)	31 (2)	34 (0)	34 (0)	29 (-2)	33 (1)	32 (0)	24 (-2)	30 (0)	30 (0)	32 (-1)	35 (-1)	35 (-2)

Note: 1. Bracketed results indicate change relative to EIS.



Source: Umwelt, 2013

Figure 1 **Revised Project – Key Features**

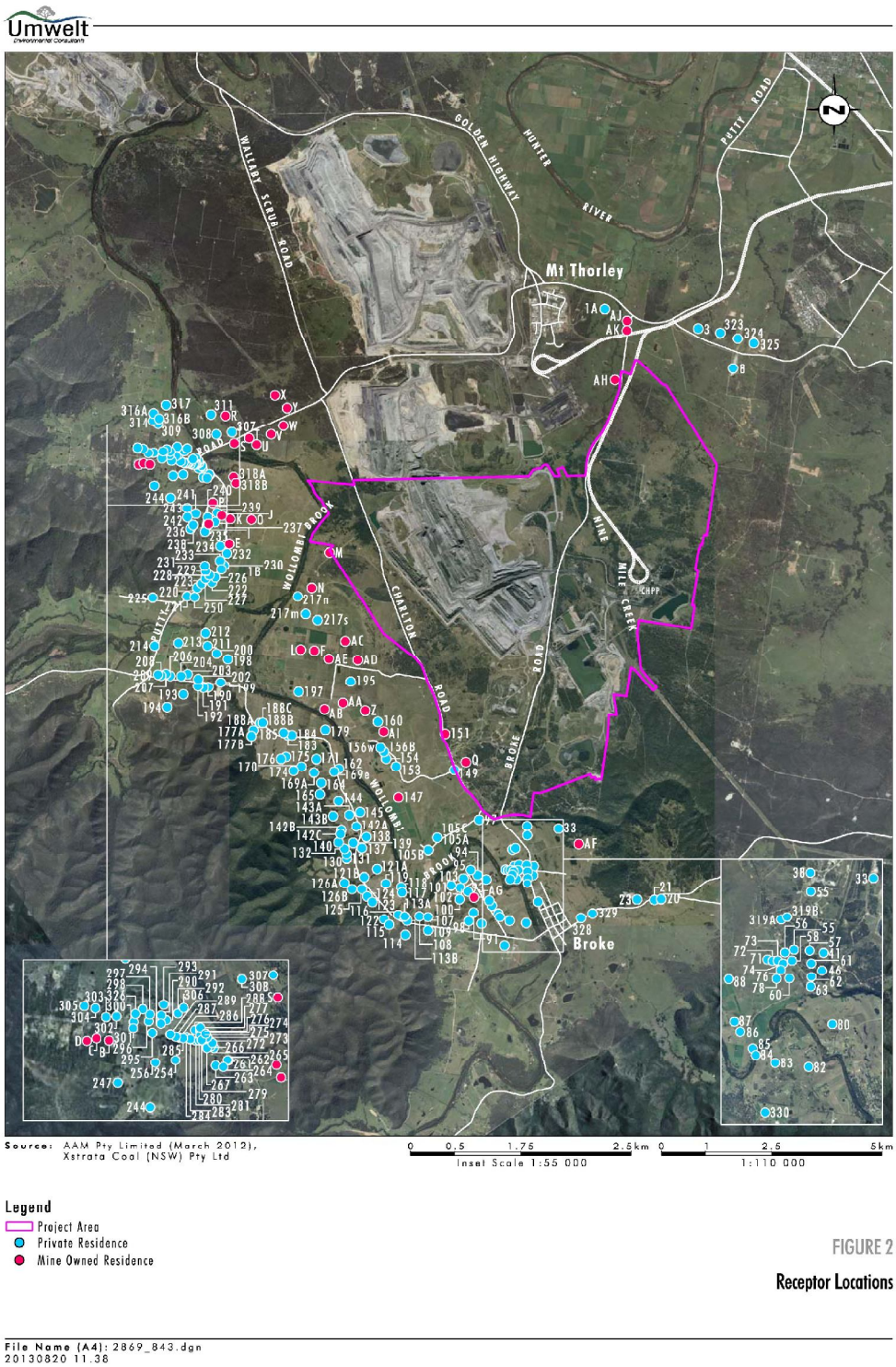


Figure 2 Receptor Locations

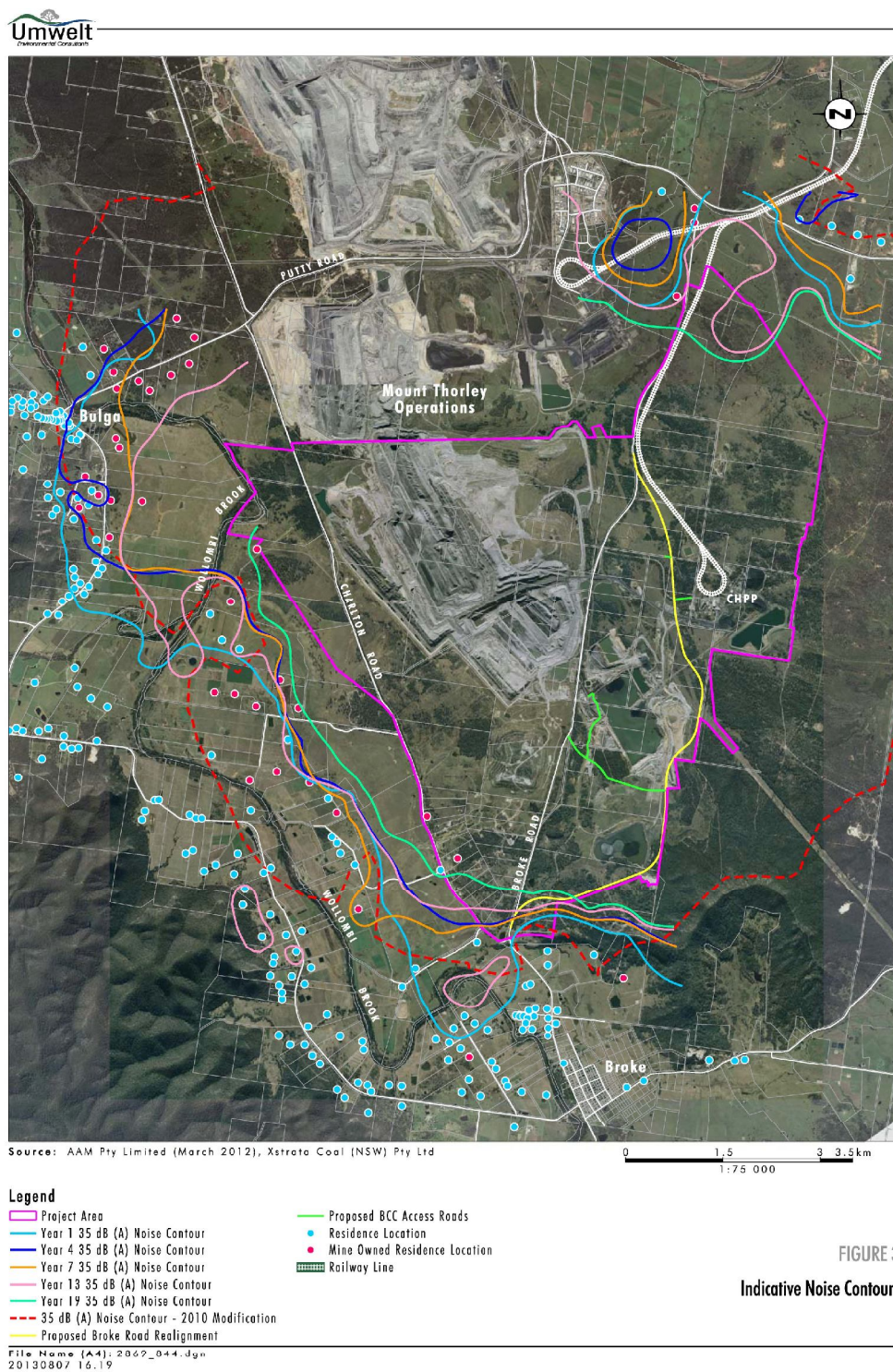


Figure 3 Indicative Noise Contours (LAeq,15minute)

Noise Mitigation Zone

Current DP&I practice is to provide rights to additional noise mitigation measures upon written request from the landowner (unless a negotiated agreement is in place) when moderate exceedances of PSNC of 3 to 5 dB are either predicted or measured in subsequent monitoring. In this assessment four non-mine owned receptors (1A, 8, 97 and 149) are predicted to receive moderate exceedances of 3 to 5 dB above PSNC. Receptors 1A and 97 are additional relative to the EIS NIA. One of these four non-mine owned properties (149) is predicted to receive a significant exceedance of more than 5 dB above PSNC. As previously mentioned, rights to noise mitigation will continue to be available to these receptors.

BCM has confirmed that those residences identified as having rights for noise mitigation and management in accordance with the Open Cut Consent, and those with predictions greater than or equal to $L_{Aeq,15\text{minute}} 38 \text{ dB}$ in the Western Limit Modification, will continue to be afforded those rights, irrespective of whether the Revised Project results in their property no longer being predicted to receive noise impacts above $L_{Aeq,15\text{minute}} 38 \text{ dB}$.

Receptors included in the noise mitigation zone are listed in Table 4.3, along with a note as to whether they are included due to the Revised Project, included due to the Western Limit Modification (WLM), or if they were included in the noise mitigation zone as per the Open Cut Consent prior to the WLM. Receptors marked with an asterisk have predictions less than $L_{Aeq,15\text{minute}} 38 \text{ dB}$ in this assessment.

Table 4.3 RECEPTORS INCLUDED IN NOISE MITIGATION ZONE

Receptor ID	Receptor Name	Status
1A	Hedley	Additional due to Revised Project
97	Lambkin	Additional due to Revised Project
232*	Medhurst	Due to WLM assessment
234*	Thompson	Due to WLM assessment
235*	Caban	Due to WLM assessment
237*	Ryan and Harrison	Due to WLM assessment
239*	Waters	Due to WLM assessment
240*	Godyn	Due to WLM assessment
261*	Smith	Due to WLM assessment
262*	Smith	Due to WLM assessment
8	Marland	Previously included in Management Zone in Open Cut Consent
149	McInerney	Previously included in Management Zone in Open Cut Consent
157*	Todhunter and Brook	Previously included in Management Zone in Open Cut Consent
179*	Brooks and Thompson	Previously included in Management Zone in Open Cut Consent
195*	Kennedy	Previously included in Management Zone in Open Cut Consent
249*	Recluse Pty Ltd	Previously included in Management Zone in Open Cut Consent

Note: 1. Receptors marked with an asterisk are currently, and will continue to be, included in the noise management zone despite having predictions less than $L_{Aeq,15minute}$ 38 dB in this assessment; and

2. Receptor 149 currently has rights to acquisition upon request.

Land Acquisition Zone

One private residence is predicted to have Revised Project related noise levels at or above $L_{Aeq,15minute}$ 40dB (the adopted noise acquisition criteria) during the early stages of the Revised Project. This residence has acquisition rights associated with the existing BCC operations. Noise levels at this residence are predicted to reduce over the life of the Project.

4.2 Vacant Lot Assessment Results

An assessment of percentage area affectation of privately owned vacant lots was undertaken for the Revised Project in the manner described in Section 5.2 of the EIS NIA.

Table 4.4 presents results of the vacant land assessment. Ten privately owned vacant lots are predicted to receive noise levels greater than $L_{Aeq,15\text{minute}} 35$ dB over 25 percent or more of the lot area. Additionally, one privately owned lot (150) is predicted to receive noise levels greater than $L_{Aeq,15\text{minute}} 40$ dB over 25 percent or more of the lot area. Results presented are based on the greatest predicted impact for all modelled stages.

Most of the vacant lots assessed are agricultural, and are used for either grazing or viticulture, with the exception of properties 11, 12, and 13, which are operated as a commercial enterprise (Stage 1 Mushroom Composting Facility). Noise acquisition and management criteria in the existing Open Cut Consent do not apply to commercial properties; these properties are included in Table 4.4 for informative purposes only.

Property 150 is subject to acquisition upon request in the current Open Cut Consent. This property is contiguous with, and has the same owner as Receptor 149. BCM will continue to offer acquisition rights to this property owner.

The area exceeding $L_{Aeq,15\text{minute}} 40$ dB on property 249 is located adjacent to Wollombi Brook on land identified as being flood liable land in the Singleton Local Environmental Plan. This property would not be conducive to construction of a residence due to the risk of flooding.

It is noted that properties 136, 150 and 320 are each contiguous with another lot that has a residence; all these lots have the same owner.

Table 4.4 VACANT LAND ASSESSMENT RESULTS

Property ID	Property Owner	Lot/DP	% Area Greater Than $L_{Aeq,15\text{minute}} 35 \text{ dB}$	% Area Greater Than $L_{Aeq,15\text{minute}} 40 \text{ dB}$
0	Laut	5/587986	75%	6%
3	Tipping	1/741554	60%	0%
11*	Mushroom Composters Pty Ltd	1/136366	100%	100%
12*	Mushroom Composters Pty Ltd	81/1006883	100%	100%
13*	Mushroom Composters Pty Ltd	82/1006883	100%	100%
96	Rozene Pty Limited	1/758164	100%	0%
104	Bird and Lambkin	121//755270	79%	0%
136	Bird and Lambkin	115/755270	14%	0%
150#	McInerney	123/755270	98%	68%
210	MacKay	21/877447	22%	0%
218	Russell	16/10022	97%	0%
219	Vassallo	15/10022	100%	0%
249	Recluse Pty Limited	5/10022	100%	22%
252	Upward	1/10137	95%	0%
320	Estvale Holdings Pty Ltd	2/1146108	73%	0%

- Note:
1. Results greater than 25 percent are shown in bold type;
 2. Asterisk denotes property is operated as commercial enterprise (stage 1 mushroom composting facility); and
 3. # denotes property has acquisition rights under the current development consent.

4.3 Sleep Disturbance Results

Results of the sleep disturbance models are less than the $L_{A1,1\text{minute}}$ criterion of 45 dB at all receptor locations. Short duration events that stand out above the general mining continuum such as dozer track noise, bucket impact noise and rocks impacting empty truck bodies will be audible. However, the predicted levels for the worst of these activities (impact on empty truck bodies) are less than 15 dB above the background noise level. As such, there is no sleep disturbance impact predicted.

4.4 Construction Noise Results

Table 4.5 presents A-weighted construction noise results. As described in Section 3.3, offsite construction noise will be primarily related to the construction activities associated with the Broke Road realignment. Noise associated with all other construction activities will be managed to comply with the development consent limits and is therefore treated as an operational noise source for compliance purposes.

Table 4.5 presents predicted construction noise levels for the Broke Road realignment during Standard Construction hours. There are no exceedances of the standard construction hours criterion of $L_{Aeq,15\text{minute}}$ 40 dB adopted in the EIS NIA. To provide an assessment of total BCC noise emissions during this period, combined results for operational noise and construction activity are also presented.

Construction noise predictions are generally low level for the majority of receptors. Therefore, results are only presented for receptors where the cumulative noise level for construction noise sources, combined with the remainder of the BCC, causes an increase to the BCC only prediction. The highest construction noise only prediction for any receptor is $L_{Aeq,15\text{minute}}$ 36 dB at receptor 149; this receptor has acquisition rights under the current Open Cut Consent. All other predictions are less PSNC.

Predicted construction noise levels in the EIS NIA were primarily generated by the Charlton Road realignment. Construction impact is significantly less for the Revised Project relative to the EIS NIA due to realignment of Charlton Road no longer being required.

Table 4.5 CONSTRUCTION NOISE LEVELS $L_{Aeq,15\text{minute}}$ dB

Receptor ID	Receptor Name	Criterion ¹	Model Predictions	
			Road Construction Without BCC	Road Construction Combined With BCC
94	Rozene Pty Limited	40	32	36
97	Lambkin	40	35	38
149*	McInerney	40	36	43
195	Kennedy	40	27	36
319A	Estvale Holdings Pty Ltd	40	34	36

Note 1. Standard construction hours construction criterion (refer to Section 2.9.1 of EIS NIA); and
 2. # denotes property has acquisition rights under the current development consent

4.5 Cumulative Noise Assessment Results

The highest predicted result due to the Revised Project for the day period in Bulga Village is $L_{Aeq,15\text{minute}}$ 34 dB. Day period noise levels predicted for the Warkworth Extension EA are well below the levels necessary to result in an exceedance of the day period cumulative noise criterion of $L_{Aeq, \text{period}}$ 50 dB.

Table 4.6 and Table 4.7 present cumulative noise assessment results for the night and evening periods respectively. Results in bold type exceed the relevant criterion. Refer to Section 5.5 of the EIS NIA for detail regarding interpreting the tables.

Results in Table 4.6 show receptor 1A, which is located in the Mount Thorley Industrial Estate area, is predicted to receive exceedance of the night period cumulative noise criterion. This receptor, and other receptors in this area have acquisition rights with Mount Thorley Warkworth mine, which is primarily responsible for the predicted cumulative noise level.

As indicated in Table 4.6 and Table 4.7, no exceedances of cumulative noise criteria are predicted in the Bulga Village area. Additionally, no exceedances of cumulative noise criteria are predicted at receptor 217s; demonstrated compliance with cumulative noise criteria at this location demonstrates compliance at other Fordwich and Milbrodale Road receptors located further from the MTW complex.

Table 4.6 CUMULATIVE NOISE RESULTS FOR NIGHT PERIOD - dB

BCC ID	MTW ID	Criterion	$L_{Aeq, \text{period}}$ Results ²				Percentage Contribution to Total	
			BCC	MTW	WML	Cumulative	BCC	MTW
1A	149	40	36	44	21	45	13%	87%
229	70	40	33	33	19	36	50%	50%
231	67	40	33	33	21	36	50%	50%
232	89	40	35	36	20	39	40%	60%
233	80	40	34	34	20	37	50%	50%
234	84	40	34	34	21	37	50%	50%
239	82	40	34	38	22	40	25%	75%
240	74	40	34	37	22	39	32%	68%
241	61	40	33	35	23	37	40%	60%
243	54	40	33	35	23	37	40%	60%
261	75	40	34	39	23	40	25%	75%
263	73	40	34	37	23	39	32%	68%
264	73	40	34	37	23	39	32%	68%
265	72	40	34	37	23	39	32%	68%

Table 4.6 CUMULATIVE NOISE RESULTS FOR NIGHT PERIOD - dB

BCC ID	MTW ID	Criterion	L _{Aeq,period} Results ²				Percentage Contribution to Total	
			BCC	MTO	WML	Cumulative	BCC	MTW
266	71	40	34	37	23	39	32%	68%
267	69	40	33	37	23	39	25%	75%
274	68	40	33	38	23	39	25%	75%
275	64	40	33	37	23	39	25%	75%
276	63	40	33	37	23	39	25%	75%
277	65	40	33	38	23	39	25%	75%
279	66	40	33	37	23	39	25%	75%
280	62	40	33	37	23	39	25%	75%
283	60	40	33	37	23	39	25%	75%
284	59	40	33	37	23	39	25%	75%
285	57	40	33	37	23	39	25%	75%
286	56	40	33	37	23	39	25%	75%
287	53	40	33	37	23	39	25%	75%
289	50	40	32	37	23	38	25%	75%
290	49	40	32	35	23	37	32%	68%
291	47	40	32	35	23	37	32%	68%
292	55	40	33	37	23	39	25%	75%
293	48	40	32	35	22	37	32%	68%
294	46	40	32	36	23	38	25%	75%
306	58	40	33	37	23	39	25%	75%
217s	111	40	33	29	20	35	63%	37%

Note: 1. Results in bold type exceed the relevant criterion (if applicable); and
2. Minus 2 dB adjustment factor applied to cumulative L_{Aeq, period} results.

Table 4.7 CUMULATIVE NOISE RESULTS FOR EVENING PERIOD - dB

			LAeq,period Results ²				Percentage Contribution to Total	
BCC ID	MTW ID	Criterion	BCC	MTO	WML	Cumulative ²	BCC	MTW
1A	149	45	36	44	21	45	13%	87%
229	70	45	34	33	19	37	50%	50%
231	67	45	34	33	21	37	50%	50%
232	89	45	35	36	20	39	40%	60%
233	80	45	34	34	20	37	50%	50%
234	84	45	35	34	21	38	50%	50%
239	82	45	34	38	22	40	25%	75%
240	74	45	34	37	22	39	32%	68%
241	61	45	34	35	23	38	40%	60%
243	54	45	33	35	23	37	40%	60%
261	75	45	34	39	23	40	25%	75%
263	73	45	34	37	23	39	32%	68%
264	73	45	34	37	23	39	32%	68%
265	72	45	34	37	23	39	32%	68%
266	71	45	34	37	23	39	32%	68%
267	69	45	33	37	23	39	25%	75%
274	68	45	33	38	23	39	25%	75%
275	64	45	33	37	23	39	25%	75%
276	63	45	33	37	23	39	25%	75%
277	65	45	33	38	23	39	25%	75%
279	66	45	33	37	23	39	25%	75%
280	62	45	33	37	23	39	25%	75%
283	60	45	33	37	23	39	25%	75%
284	59	45	33	37	23	39	25%	75%
285	57	45	33	37	23	39	25%	75%
286	56	45	33	37	23	39	25%	75%
287	53	45	33	37	23	39	25%	75%
289	50	45	32	37	23	38	25%	75%
290	49	45	32	35	23	37	32%	68%
291	47	45	32	35	23	37	32%	68%

Table 4.7 CUMULATIVE NOISE RESULTS FOR EVENING PERIOD - dB

BCC ID	MTW ID	Criterion	L _{Aeq,period} Results ²				Percentage Contribution to Total	
			BCC	MTO	WML	Cumulative ²	BCC	MTW
292	55	45	33	37	23	39	25%	75%
293	48	45	32	35	22	37	32%	68%
294	46	45	32	36	23	38	25%	75%
306	58	45	33	37	23	39	25%	75%
217s	111	45	34	29	20	35	79%	21%

Note: 1. Results in bold type exceed the relevant criterion (if applicable); and
 2. Minus 2 dB adjustment factor applied to cumulative L_{Aeq, period} results.

4.6 Low Frequency Noise Assessment Results

4.6.1 Operational Low Frequency Noise Results

Broner Method Results

The NSW DP&I have indicated the preferred method for assessment of LFN is the Broner method (described in Section 2.6 of the EIS NIA) which identifies $L_{Ceq, 15 \text{ minute } 60 \text{ dB}}$ as the appropriate LFN criterion.

All total C-weighted predictions, with the exception of receptor 149 which has acquisition rights with BCM, are less than or equal to $L_{Ceq, 15 \text{ minute } 50 \text{ dB}}$ which is 10 dB or more below the desirable LFN limit of $L_{Ceq, 15 \text{ minute } 60 \text{ dB}}$.

Based on the results of the Broner method assessment, LFN is not considered likely to cause impact.

INP Method Results

A significant increase in the number of receptors with C minus A predictions greater than or equal to 15 dB (INP method) is predicted relative to the EIS NIA. This is due in part to a minor increase in total C-weighted levels (typically 1 to 2 dB) resulting from the revised Caterpillar 797 truck sound power and the relocation of the ventilation fans, and in part to a reduction in A-weighted predictions at some receptors, which widens the gap between C and A weighted levels.

Table 4.8 indicates the count of receptors with A-weighted predictions greater than $L_{Aeq, 15 \text{ minute } 30 \text{ dB}}$, and, C minus A result greater than or equal to 15 dB by stage and time period. The number of discreet receptors within each stage is also indicated. Receptors with A-weighted predictions less than or equal to $L_{Aeq, 15 \text{ minute } 30 \text{ dB}}$ are not included, as application of an LFN modifying factor penalty would not cause exceedance of PSNC, and both A-weighted and C-weighted predictions are low level in these cases. Using a strict application of the INP, these properties would attract a 5dB penalty to be added to their predicted $L_{Aeq, 15 \text{ minute}}$ noise levels.

Table 4.8 OPERATIONAL C MINUS A LFN RESULTS

Stage	Count of NSR > 30 dB, AND, C-A >= 15 dB			
	Day	Evening	Night	Discreet
Year 1	2	6	5	7
Year 4	22	21	38	62
Year 7	30	44	51	78
Year 13	10	37	40	51
Year 19	0	6	5	6

C-weighted predictions for all modelled receptors are included in Table B.2 in Appendix B.

C minus A predictions for all receptors are included in Table B.3 in Appendix B.

As indicated in the EPA submission on the EIS dated 26 July 2013, the INP assessment methodology for LFN is currently under review and EPA has identified that alternative approaches to the assessment of LFN will be considered where the strict application of the INP methodology leads to perverse outcomes.

In the present case, the C minus A differential values that would trigger an INP $L_{Aeq, 15 \text{ minute } 5dB}$ penalty only just meet the INP threshold (C minus A differential of 15 or 16) and typically have $L_{Aeq, 15 \text{ minute}}$ predictions of less than 33dB. A small increase in A-weighted noise from the Project at these properties without any increase in C-weighted noise levels would mean the C minus A differential of 15 would not be triggered and noise at the receiver would still be within the PSNC of $L_{Aeq, 15 \text{ minute } 35dB}$. Additionally, a strict application of the penalty in these circumstances would mean an $L_{Ceq, 15 \text{ minute}}$ of 50dB would be acceptable at one premises while a lower C-weighted noise level at another was not. This is considered to be inappropriate, particularly given the C-weighted noise levels in question are significantly below the desirable LFN criteria identified by the Broner method.

Accordingly, the Broner method for assessment of LFN is preferred.

All C-weighted predictions, with the exception of receptor 149 which has acquisition rights with BCM, are less than or equal to $L_{Ceq, 15 \text{ minute } 50 \text{ dB}}$. This is considerably less than the preferred Broner criterion (in acoustic terms, only one tenth of), and not more than that allowable for a receptor for which $L_{Aeq 35 \text{ dB}}$ has been predicted. LFN penalties have therefore not been applied.

4.6.1 Construction Low Frequency Noise Results

An assessment of construction LFN was undertaken considering construction noise associated with the realignment of Broke Road.

Broner Method Results

Total C-weighted predictions were less than $L_{Ceq, 15 \text{ minute}}$ 60 dB for all receptors; the highest predicted level was $L_{Ceq, 15 \text{ minute}}$ 43dB.

INP Method Results

There were no receptors with a C minus A result greater than or equal to 15 dB, and, A-weighted predictions greater than $L_{Aeq, 15 \text{ minute}}$ 30 dB.

LFN is not considered likely to cause impact; no LFN modifying factor penalties have been applied.

5 NOISE MITIGATION STRATEGIES

5.1 Operational Controls and Management Strategies

BCM intends to achieve the predicted noise levels presented in Section 4.1 through the adoption of the following operational controls and management strategies to assist in managing noise emissions from the site:

Operational Controls

- ❑ Development of a noise and visual bund on the western extent of the site to provide shielding to receptors west and south west of the site;
- ❑ Place and shape overburden on the exposed outer surface of the noise and visual bund only during day shift (7am to 7pm);
- ❑ Implement overburden emplacement strategies to meet relevant noise criteria. This may include measures such as provision of shielded tipping locations for night time dumping and different day time and night time dumping scenarios;
- ❑ Construct haul road bund, where safe and practicable to do so, to a height of approximately 5 m above road level for all haul roads above RL80m, and to selected exposed haul roads below RL80m, to reduce noise emanating to the west of the operations;
- ❑ Inclusion of a 6 metre high acoustic barrier on the south and west sides of the road base crusher used for construction material;
- ❑ Retention of the hydraulic snubber on the face shovel so this noise source will not be a cause of sleep disturbance;
- ❑ Construction related sleep disturbance generating activities will be avoided outside of standard construction hours;
- ❑ Construct ten metre high earth bunds to prevent line of sight from the ventilation fans to receptors west of the site when relocated to the top of the Whybrow highwall;
- ❑ Specify a limiting sound power in tender documents for the Hitachi EX8000 replacement excavator of L_W 124 dB;
- ❑ Operation of the quietest suitable equipment in sensitive areas such as excavation close to the surface during adverse meteorological conditions; and
- ❑ Construct haul roads to out of pit emplacement areas such as the Noise and Visual Bund strategically to obtain beneficial topographical shielding from

already constructed emplacement areas.

Management Strategies

- ❑ Continuation of regular sound power screening testing that will assist in managing equipment sound power levels, and identify plant items requiring maintenance to noise attenuation packages;
- ❑ Continuous noise monitoring will be continued at strategic off site locations to provide real time feedback to the mine for noise management. Current locations and trigger levels are outlined in the *Bulga Coal Complex Noise Management Plan* (BCM, 2010);
- ❑ Monitoring of real time meteorological conditions and forecasts to assist in noise management;
- ❑ Development of a complaints investigation protocol with Mount Thorley Warkworth mine to address noise complaints from the Bulga Village area, in consultation with MTW;
- ❑ Offering reasonable and feasible noise mitigation measures such as double glazing, insulation and/or air conditioning will be made available to affected landowners in the noise mitigation zone (predictions greater than or equal to $L_{Aeq,15\text{minute}} 38 \text{ dB}$) upon request; and
- ❑ Management of construction activities on Charlton and Broke Roads outside of standard construction hours to achieve compliance with the operational noise limits prescribed in the Project's Development Consent unless otherwise agreed with affected landholders.

BCM operate Best Available Technology Economically Achievable (BATEA) plant, utilise acoustic bunds on exposed haul roads, and implement day and night operating scenarios to manage noise emissions from the site. These elements, and the control options and management strategies detailed above have been incorporated into the modelling assessment. In Global Acoustics' opinion, all reasonable and feasible noise mitigation measures have been applied to the Revised Project.

6 OHS FOR COMPOSTING FACILITY

Noise exposure regulations in NSW are those contained in the *Work Health And Safety Regulation 2011*, under the *Work Health and Safety Act 2011*. This regulation (the relevant section of which is reproduced below) limits daily noise exposure to an $L_{Aeq,8h}$ of 85 dB and the maximum peak noise level (L_{Cpk}) to 140 dB.

56 Meaning of “exposure standard for noise”

- (1) In this Regulation, *exposure standard for noise*, in relation to a person, means:

- (a) $L_{Aeq,8h}$ of 85 dB(A), or
- (b) $L_{C,peak}$ of 140 dB(C).

- (2) In this clause:

$L_{Aeq,8h}$ means the eight-hour equivalent continuous A-weighted sound pressure level in decibels (dB(A)) referenced to 20 micropascals, determined in accordance with AS/NZS 1269.1:2005 (*Occupational noise management—Measurement and assessment of noise immission and exposure*).

$L_{C,peak}$ means the C-weighted peak sound pressure level in decibels (dB(C)) referenced to 20 micropascals, determined in accordance with AS/NZS 1269.1:2005 (*Occupational noise management—Measurement and assessment of noise immission and exposure*).

57 Managing risk of hearing loss from noise

- (1) A person conducting a business or undertaking at a workplace must manage, in accordance with Part 3.1, risks to health and safety relating to hearing loss associated with noise.

Note. WHS Act—section 19 (see clause 9).

- (2) A person conducting a business or undertaking at a workplace must ensure that the noise that a worker is exposed to at the workplace does not exceed the exposure standard for noise.

An assessment of potential noise impact to employees at the mushroom composting facility located east of the EEA has been undertaken.

Noise levels more than 10 dB different cannot combine to cause an increase to the higher level. Therefore, limiting noise levels generated by the Revised Project to workers at the composting facility to $L_{Aeq, 8 \text{ hour}}$ 75 dB means the daily noise exposure limit of $L_{Aeq, 8 \text{ hour}}$ 85 dB cannot be exceeded.

A conservative assessment has been undertaken considering geometric spreading (distance loss) only. Table 6.1 presents the limiting sound power that can be generated at various distances from the point at which noise is received (the composting facility workers operating location), such that the limiting criterion of $L_{Aeq, 8 \text{ hour}}$ 75 dB is not exceeded. Additionally, the number of rear dump trucks (or equivalent plant items) it takes to generate the limiting sound power is indicated. This calculation is based on the A-weighted sound power of rear dump trucks at BCM of $L_{Aeq, 15 \text{ minute}}$ 115 dB, as per Table 4.5 of the BOP NIA. It is noted dozers,

which may also operate in close proximity to the composting facility boundary, also have a sound power of $L_{Aeq, 15 \text{ minute}}$ 115 dB.

It is not known how close employees at the mushroom composting facility may be required to work to operations at BCM; the mushroom composting facility and BCM share a common boundary. However, the minimum distance from the mushroom composting facility boundary to the closest point within the emplacement area is approximately 300 metres. Although it is highly unlikely mushroom composting facility employees would be required to work within 100 metres of operating plant at BCM, this assessment has conservatively considered this distance as a minimum.

Table 6.1 OH&S ASSESSMENT RESULTS

Distance (m)	Limiting $L_{Aeq, 8 \text{ hour}}$ Sound Power	Equivalent Quantity of Plant
100	123	6
200	129	25
300	133	63
400	135	100
500	137	158

The results indicate six trucks (or equivalent plant items) could operate continuously for 8 hours at 100 metres from a composting facility employee without exceeding the limiting criterion of $L_{Aeq, 8 \text{ hour}}$ 75 dB. At 300 metres, 63 trucks could operate continuously for 8 hours. Such scenarios would never actually occur; therefore, noise generated by the Revised Project could not cause exceedance of the daily noise exposure limit of $L_{Aeq, 8 \text{ hour}}$ 85 dB for workers at the mushroom composting facility.

Years of monitoring OH&S noise levels for mining operations have shown that the maximum peak noise level of L_{Cpk} 140 dB is never exceeded for workers located in close proximity to operating mobile plant. Therefore, exceedance of this criterion is extremely unlikely for people working more than 100 metres from any mining plant item.

Based on the results of this assessment, and in Global Acoustics' professional opinion, the Revised Project would not cause exceedance of relevant OH&S criteria to workers at the nearby mushroom composting facility.

7 SUMMARY

Model results for the Revised Project indicate forty-five receptors are predicted to experience exceedance of PSNC at some stage during the life of the Project, and as such, are categorised into the noise management zone. This is an increase of four receptors relative to the EIS NIA. Of these:

- Forty-one receptors have minor exceedances of 1 to 2 dB above PSNC;
- Three receptors have moderate exceedances of 3 to 5 dB above PSNC; and
- One receptor has a significant exceedance of more than 5 dB above PSNC.

Discussion regarding the four receptors with moderate to significant exceedances follows:

- Receptor 1A (Hedley) has a prediction of $L_{Aeq,15\text{minute}}$ 38 dB during the evening and night periods in Year 4. This receptor has a criterion of $L_{Aeq,15\text{minute}}$ 37 dB under the current Open Cut Consent, and is therefore an additional receptor to the management zone as a result of the Revised Project. This receptor has acquisition rights with Mount Thorley Warkworth mine.
- Receptor 8 (Marland) has a prediction of $L_{Aeq,15\text{minute}}$ 38 dB during the evening and night periods in Year 4. This receptor has a criterion of $L_{Aeq,15\text{minute}}$ 39 dB under the current Open Cut Consent, and is entitled to additional noise mitigation measures upon written request from the landowner. Rights for noise mitigation and management would continue to be available to this receptor. Receptor 97 (Lambkin) has a prediction of $L_{Aeq,15\text{minute}}$ 38 dB during the evening period in Year 1. This receptor has a criterion of $L_{Aeq,15\text{minute}}$ 36 dB under the current Open Cut Consent, and is therefore an additional receptor to the management zone as a result of the Revised Project.
- Receptor 149 (McInerney) has predictions up to $L_{Aeq,15\text{minute}}$ 42 dB; it is noted that this receptor currently has acquisition rights under the current Open Cut Consent, and the owner of this property has a private agreement with BCM to allow higher noise levels; offers from BCM to purchase this property have been declined. BCM will continue to offer acquisition rights to this property owner.

In general terms, the greatest impact is predicted during Year 1 of the Project, with a reduction in impact over the life of the Project. By Year 13, seven receptors are predicted to receive exceedances of PSNC, one of which currently has acquisition rights under the current Open Cut Consent. Despite the generally low level of impact predicted for the Revised Project, BCM recognises the need to progressively modify, alter or shut down operations as required in response to noise issues, and are cognisant of the need to budget for lost production accordingly. A network of four off-site real-time noise monitors is used to alarm site personnel when measured noise is approaching threshold levels, and action is required. This real time

monitoring and alarming system has been operational since September 2010.

The highest construction noise prediction for any receptor was $L_{Aeq,15\text{minute}}$ 36 dB at receptor 149; this receptor has acquisition rights under the current Project Approval. All other predictions are less than PSNC. Construction noise impact is significantly less for the Revised Project than for the original Project as outlined in the EIS NIA due to realignment of Charlton Road no longer being required. Construction may be required outside standard construction hours, in which case construction personnel would be required to manage noise emissions through modifying or ceasing operations, as required, to comply with the operational noise limits prescribed in the Project's Development Consent. If operating between 10pm and 7am, sleep disturbance generating activities would need to be avoided.

Ten privately owned vacant lots are predicted to receive noise levels greater than $L_{Aeq,15\text{minute}}$ 35 dB over 25 percent or more of the lot area. Additionally, one privately owned lot (150) is predicted to receive noise levels greater than $L_{Aeq,15\text{minute}}$ 40 dB over 25 percent or more of the lot area. Assessing vacant land in this manner is not a requirement of the INP, however, was included in this assessment as the existing Open Cut Consent contains conditions pertaining to vacant lots and it is typically considered by DP&I.

Results of the sleep disturbance models are less than the $L_{A1,1\text{ minute}}$ criterion of 45 dB at all receptor locations. As such, there is no sleep disturbance impact predicted.

Receptor 1A, which is located in the Mount Thorley Industrial Estate area, is predicted to receive exceedance of the night period cumulative noise criterion. This receptor, and other receptors in this area have acquisition rights with Mount Thorley Warkworth mine, which is primarily responsible for the predicted cumulative noise levels.

No exceedances of cumulative noise criteria are predicted in the Bulga Village area. Additionally, no exceedances of cumulative noise criteria are predicted at receptor 217s; demonstrated compliance with cumulative noise criteria at this location demonstrates compliance at other Fordwich and Milbrodale Road receptors located further from the MTW complex.

Low frequency noise was assessed using both the INP guideline method, and the Broner method. A significant increase in the number of receptors triggering the INP C minus A LFN penalty criterion of 15 dB was predicted relative to the EIS NIA. This increase is partly to a change in modelled sound power for CAT 797 trucks and partly due to an overall reduction in A-weighted noise from the operation as a result of design changes. As discussed earlier, for this Project, a strict application of the INP approach to LFN is considered to result in a perverse assessment outcome. Following discussions with the EPA and DP&I it is considered appropriate that this Project adopts $L_{Ceq, 15\text{ minute}}$ 60 dB as per Broner. Accordingly no LFN modifying

factor penalties were applied.

There is no change to road traffic noise or rail noise impacts as a result of the Revised Project relative to the EIS NIA.

A number of noise controls were included in the assessment (refer to Section 3.4). It is our opinion that all reasonable and feasible noise reduction measures are implemented in this assessment, and model predictions are what BCM are likely to achieve.

The Revised Project results in a slight increase to the overall zone of affectation relative to the EIS NIA, with four additional receptors added to the management zone, and two receptors added to the mitigation zone. There is no change to the acquisition zone.

It should be noted that mining noise is not new to the Project surrounds. This proposal is essentially an extension to the status quo with long term lowering of noise as the project progresses. Some receptors may experience slightly more noise than previously (also known as residual impact), but for the majority it is predicted to be only a minor change, probably imperceptible.

Global Acoustics Pty Ltd

8 REFERENCES

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APPENDIX

A. A-WEIGHTED OPERATIONAL NOISE RESULTS

Table A.1 presents total A-weighted predictions for all assessed NSR. Bolded results exceed PSNC. Bracketed results indicate the change in predictions relative to the EIS NIA.

Table A.1 A-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Aeq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
1A	Hedley	33 (1)	35 (1)	35 (0)	36 (2)	38 (3)	38 (2)	33 (-1)	35 (-1)	35 (-1)	29 (-1)	32 (1)	32 (1)	27 (-2)	30 (-2)	30 (-2)
1B	Cant	34 (0)	36 (0)	36 (1)	31 (-2)	35 (-1)	34 (-1)	33 (4)	35 (-2)	35 (-1)	31 (-2)	34 (-1)	34 (0)	27 (-1)	30 (0)	30 (0)
8	Marland	32 (0)	34 (0)	35 (0)	36 (4)	38 (4)	38 (3)	32 (-4)	34 (-3)	35 (-3)	27 (-6)	31 (-4)	32 (-4)	25 (-7)	30 (-5)	31 (-4)
20A	Bosco	31 (1)	33 (0)	32 (0)	27 (-1)	31 (0)	31 (0)	28 (1)	31 (0)	31 (1)	27 (1)	31 (1)	31 (2)	25 (0)	29 (0)	29 (0)
20B	Bosco	31 (1)	33 (0)	32 (0)	27 (-1)	31 (0)	31 (0)	28 (1)	31 (0)	31 (1)	27 (1)	31 (1)	31 (2)	25 (0)	29 (0)	29 (0)
21	Rogers	30 (1)	33 (1)	33 (2)	27 (0)	31 (0)	31 (1)	27 (1)	31 (0)	31 (1)	25 (2)	31 (1)	30 (1)	23 (0)	29 (0)	29 (1)
23	Hungerford	24 (-2)	30 (0)	30 (2)	21 (-1)	29 (1)	28 (1)	20 (-2)	28 (-2)	28 (-1)	19 (-3)	27 (-2)	26 (-2)	13 (-9)	26 (-3)	26 (-2)
33	Stevens and Company Pty Limited	28 (1)	29 (2)	27 (3)	20 (0)	29 (3)	27 (6)	21 (2)	29 (2)	28 (7)	19 (-1)	25 (-1)	20 (1)	17 (-1)	23 (-5)	22 (3)
37	Earl	23 (1)	22 (1)	21 (2)	19 (1)	22 (1)	20 (1)	19 (2)	22 (1)	20 (2)	19 (0)	21 (1)	20 (2)	17 (-1)	20 (0)	19 (1)
38	Parkes	32 (1)	30 (1)	27 (2)	24 (1)	29 (-1)	28 (4)	25 (3)	30 (0)	28 (4)	21 (-1)	30 (0)	27 (4)	19 (0)	30 (2)	26 (4)
41	Darcy Byron Pty Ltd	32 (0)	34 (1)	34 (3)	31 (2)	34 (1)	34 (3)	30 (1)	33 (1)	33 (2)	28 (-1)	31 (0)	30 (0)	25 (0)	31 (0)	30 (2)
46	Gleave	33 (1)	34 (0)	34 (2)	31 (1)	34 (1)	34 (3)	30 (1)	33 (1)	32 (1)	28 (-1)	31 (0)	30 (0)	26 (0)	30 (0)	30 (2)
55	Crow	32 (-1)	35 (1)	34 (2)	31 (1)	34 (1)	34 (2)	30 (1)	34 (1)	33 (2)	28 (-1)	32 (0)	32 (2)	27 (0)	31 (0)	31 (2)
56	Lambkin	32 (0)	35 (1)	34 (2)	31 (1)	34 (1)	34 (3)	30 (1)	33 (0)	33 (2)	28 (-1)	32 (0)	32 (1)	26 (-1)	31 (0)	30 (1)
57	Rogers	33 (0)	34 (-1)	34 (2)	31 (1)	34 (1)	34 (3)	30 (1)	33 (1)	33 (2)	29 (0)	32 (0)	32 (2)	26 (-2)	31 (0)	30 (1)

Table A.1 A-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Aeq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
58	Stafa	33 (1)	35 (1)	34 (2)	31 (1)	34 (1)	34 (2)	30 (1)	33 (1)	33 (2)	28 (-1)	32 (0)	32 (1)	27 (0)	31 (0)	30 (1)
60	Poile	32 (0)	35 (1)	34 (2)	30 (0)	34 (1)	33 (1)	30 (1)	33 (1)	33 (2)	28 (-1)	32 (0)	31 (0)	27 (0)	31 (0)	30 (1)
61	Larkin	33 (1)	35 (1)	34 (2)	31 (1)	34 (1)	34 (3)	30 (0)	33 (0)	33 (1)	29 (-1)	32 (0)	32 (1)	26 (-1)	31 (0)	30 (1)
62	Sanger	33 (1)	35 (1)	34 (2)	31 (1)	34 (1)	33 (1)	30 (1)	33 (1)	33 (2)	28 (-1)	32 (1)	32 (1)	26 (-1)	31 (0)	30 (1)
63	O'Toole	32 (0)	35 (1)	34 (2)	30 (0)	34 (2)	33 (1)	30 (1)	33 (1)	33 (2)	28 (-1)	31 (0)	31 (1)	26 (-1)	30 (-1)	30 (1)
71	Garth	32 (0)	35 (1)	34 (2)	31 (1)	34 (1)	34 (2)	30 (0)	34 (1)	33 (1)	29 (0)	33 (1)	33 (2)	26 (-1)	31 (0)	30 (1)
72	Matley	33 (0)	35 (1)	34 (1)	30 (0)	34 (1)	34 (2)	30 (1)	33 (0)	33 (2)	28 (-1)	32 (0)	32 (1)	27 (0)	31 (0)	30 (1)
73	Hebbe and Bush	32 (-1)	35 (1)	34 (1)	30 (0)	34 (1)	34 (2)	30 (1)	33 (0)	33 (2)	28 (-1)	32 (0)	32 (2)	27 (0)	31 (0)	30 (2)
74	Towers and Maviglia	32 (0)	35 (1)	34 (2)	30 (0)	34 (1)	34 (2)	30 (1)	33 (0)	33 (2)	28 (-1)	32 (0)	32 (1)	27 (0)	31 (0)	30 (2)
76	Chaffey	32 (0)	35 (1)	34 (1)	30 (0)	34 (1)	34 (2)	30 (1)	33 (0)	33 (2)	28 (-1)	32 (0)	32 (1)	27 (0)	31 (0)	30 (1)
78	Smolenaers	32 (-1)	35 (1)	34 (1)	30 (0)	34 (1)	34 (2)	30 (1)	33 (0)	33 (2)	28 (-1)	32 (0)	32 (1)	27 (0)	31 (0)	30 (1)
80	Duggan	32 (1)	34 (0)	34 (2)	30 (1)	33 (1)	33 (2)	29 (0)	32 (0)	32 (1)	28 (0)	31 (0)	30 (1)	26 (-1)	30 (0)	29 (1)
82	Mears	31 (0)	33 (0)	33 (2)	30 (1)	33 (2)	33 (3)	29 (0)	32 (1)	32 (2)	28 (0)	31 (1)	30 (1)	26 (-1)	29 (0)	29 (1)
83	Nightingale Vineyards PTY Limited	31 (0)	34 (1)	33 (1)	30 (1)	33 (1)	33 (3)	29 (0)	33 (1)	33 (3)	29 (1)	31 (0)	31 (1)	26 (-1)	30 (0)	29 (1)
84	Stacey	32 (0)	34 (0)	33 (1)	30 (1)	33 (1)	33 (2)	30 (1)	34 (2)	33 (2)	29 (0)	32 (1)	31 (1)	27 (0)	30 (0)	30 (2)
85	Towns	32 (0)	34 (0)	33 (0)	30 (1)	33 (1)	33 (2)	30 (1)	34 (2)	33 (2)	29 (0)	32 (1)	31 (1)	27 (0)	30 (0)	30 (2)
86	Richardson	31 (0)	33 (0)	32 (1)	29 (1)	32 (1)	31 (1)	30 (1)	34 (2)	33 (3)	29 (0)	33 (1)	32 (2)	27 (0)	31 (0)	30 (1)

Table A.1 A-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Aeq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
87	Connolly	31 (0)	33 (1)	32 (1)	29 (0)	32 (1)	31 (1)	30 (1)	34 (3)	33 (3)	28 (-1)	34 (3)	32 (2)	27 (1)	31 (1)	30 (2)
88	Ferguson	33 (-1)	35 (0)	35 (2)	31 (0)	35 (2)	34 (2)	31 (1)	35 (2)	34 (2)	29 (-1)	35 (2)	33 (2)	27 (-1)	32 (0)	31 (1)
90	Tsiolkas	30 (-1)	32 (1)	31 (1)	29 (1)	32 (2)	31 (2)	30 (2)	33 (2)	32 (3)	29 (0)	33 (2)	32 (3)	26 (0)	30 (0)	29 (1)
91	Dunn and Wakeman	30 (-1)	32 (0)	31 (1)	28 (0)	30 (0)	29 (0)	29 (0)	32 (1)	31 (2)	29 (1)	32 (2)	31 (3)	26 (0)	29 (0)	28 (1)
93	Danks	33 (-1)	35 (0)	35 (1)	31 (0)	34 (1)	34 (2)	32 (2)	35 (3)	34 (3)	30 (0)	34 (2)	33 (2)	27 (-1)	31 (-1)	30 (1)
94	Rozene Pty Limited	34 (0)	36 (1)	35 (1)	32 (1)	35 (2)	34 (2)	32 (2)	35 (2)	34 (2)	30 (-1)	35 (2)	34 (2)	28 (-1)	32 (0)	31 (1)
95	Rozene Pty Limited	34 (-1)	36 (1)	35 (1)	32 (0)	35 (1)	34 (2)	32 (1)	36 (3)	35 (3)	30 (0)	35 (2)	34 (2)	28 (-1)	32 (0)	31 (1)
97	Lambkin	35 (0)	38 (2)	36 (2)	31 (0)	34 (1)	33 (1)	31 (0)	34 (1)	33 (1)	33 (3)	32 (0)	31 (0)	29 (0)	32 (0)	31 (1)
98	Fromberg	32 (0)	34 (1)	33 (1)	30 (1)	33 (2)	32 (2)	31 (2)	34 (2)	33 (3)	29 (0)	33 (2)	32 (2)	26 (-1)	30 (0)	29 (1)
100	Calcott-McKenzie	30 (-1)	33 (1)	32 (1)	28 (1)	31 (1)	31 (4)	27 (2)	30 (1)	29 (3)	24 (0)	27 (-1)	26 (1)	21 (-2)	26 (-1)	25 (0)
101	Boustred Spence Turner and Cowan	33 (0)	35 (1)	35 (2)	31 (1)	35 (3)	33 (2)	31 (2)	35 (2)	33 (2)	30 (0)	34 (1)	33 (2)	27 (-1)	31 (-1)	30 (0)
102	Morsillo	34 (0)	35 (0)	35 (1)	31 (0)	35 (2)	34 (2)	31 (1)	35 (2)	34 (3)	30 (0)	34 (1)	33 (2)	27 (-1)	31 (-1)	30 (0)
103	Bell	34 (0)	36 (1)	35 (1)	32 (1)	35 (2)	34 (2)	32 (2)	35 (2)	34 (3)	30 (0)	34 (1)	33 (1)	28 (-1)	32 (0)	31 (1)
105A	Bird and T Lambkin	33 (0)	36 (2)	34 (2)	31 (1)	34 (1)	33 (2)	32 (1)	35 (2)	33 (1)	32 (2)	35 (2)	33 (2)	29 (0)	32 (-1)	31 (1)
105B	Bird and T Lambkin	32 (0)	34 (1)	33 (2)	30 (1)	32 (1)	31 (2)	31 (1)	34 (2)	33 (2)	31 (2)	34 (2)	33 (3)	28 (-1)	31 (-1)	30 (0)
105C	Bird and T Lambkin	33 (0)	36 (2)	34 (2)	31 (1)	34 (1)	33 (2)	32 (1)	35 (2)	33 (1)	32 (2)	35 (2)	33 (2)	29 (0)	32 (-1)	31 (1)
108	Cowan	31 (0)	32 (0)	31 (1)	28 (0)	31 (1)	31 (2)	30 (2)	33 (2)	32 (3)	29 (0)	33 (2)	32 (3)	26 (-1)	30 (0)	29 (1)

Table A.1 A-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Aeq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
109	Romke	30 (-1)	32 (0)	32 (2)	29 (1)	32 (2)	31 (2)	30 (2)	33 (2)	32 (3)	28 (-1)	32 (1)	32 (3)	26 (-1)	29 (-1)	29 (1)
113B	Cowan	30 (0)	32 (1)	31 (1)	28 (0)	32 (2)	31 (2)	30 (2)	32 (1)	31 (2)	28 (-1)	32 (1)	31 (2)	25 (-2)	29 (-1)	28 (0)
113A	Cowan	30 (0)	32 (1)	31 (1)	28 (0)	32 (2)	31 (2)	30 (2)	32 (1)	31 (2)	28 (0)	33 (2)	31 (2)	26 (0)	29 (-1)	28 (0)
114	Palmer	30 (0)	32 (0)	32 (1)	29 (1)	32 (2)	31 (3)	30 (3)	32 (2)	31 (2)	28 (0)	32 (2)	31 (2)	25 (-1)	29 (0)	28 (1)
115	Goldfinch	30 (0)	32 (0)	31 (1)	29 (1)	32 (2)	31 (3)	30 (3)	33 (2)	32 (3)	28 (0)	32 (1)	31 (2)	25 (-1)	29 (0)	28 (0)
116	Houtzaager	30 (0)	32 (0)	31 (1)	29 (1)	31 (1)	30 (1)	30 (2)	32 (1)	31 (2)	28 (0)	32 (1)	31 (2)	26 (0)	29 (-1)	28 (0)
117	Tolson	30 (0)	32 (1)	31 (2)	28 (1)	30 (0)	30 (2)	29 (1)	31 (1)	30 (1)	29 (2)	32 (3)	31 (3)	26 (-1)	29 (0)	28 (0)
118	McManus	30 (0)	33 (2)	31 (2)	28 (1)	30 (0)	29 (2)	29 (1)	31 (1)	30 (1)	29 (2)	31 (2)	30 (2)	26 (-1)	28 (-1)	27 (0)
119	Hann-Devries	31 (0)	34 (1)	32 (2)	28 (1)	31 (2)	30 (2)	29 (2)	32 (2)	31 (3)	27 (0)	30 (0)	30 (3)	25 (-1)	29 (1)	28 (1)
121B	Hope	31 (0)	32 (1)	31 (1)	28 (0)	32 (2)	31 (2)	31 (3)	34 (3)	32 (3)	29 (0)	32 (1)	31 (1)	26 (-1)	30 (0)	29 (1)
121A	Hope	31 (0)	32 (1)	31 (1)	28 (0)	33 (3)	31 (2)	30 (2)	33 (2)	31 (2)	28 (0)	32 (2)	30 (1)	26 (-1)	30 (1)	29 (2)
122	Warr	30 (0)	32 (0)	31 (1)	29 (1)	32 (2)	31 (2)	30 (3)	33 (2)	32 (3)	29 (1)	32 (1)	31 (2)	25 (-1)	29 (0)	28 (0)
123	Jackson and Edwards	31 (1)	32 (0)	32 (2)	29 (1)	32 (2)	31 (2)	31 (3)	33 (2)	32 (3)	30 (1)	33 (2)	32 (3)	26 (-1)	30 (0)	29 (0)
124	Kearns and McKell	31 (0)	33 (1)	32 (2)	29 (1)	32 (2)	31 (2)	31 (3)	33 (2)	32 (3)	30 (1)	33 (2)	32 (2)	26 (-1)	30 (0)	29 (0)
125	Little	31 (0)	33 (1)	32 (2)	29 (1)	33 (3)	31 (2)	31 (3)	34 (3)	32 (3)	30 (0)	33 (1)	32 (2)	27 (-1)	30 (0)	29 (0)
126A	Coranton Pty Limited	31 (1)	32 (1)	30 (1)	29 (1)	32 (3)	31 (3)	31 (3)	33 (3)	32 (3)	30 (0)	33 (2)	32 (3)	26 (-1)	29 (-1)	28 (0)
126B	Coranton Pty Limited	31 (0)	32 (1)	31 (1)	29 (1)	32 (2)	31 (2)	31 (3)	34 (4)	32 (3)	30 (1)	33 (1)	32 (3)	26 (-1)	29 (-1)	28 (0)
130	Wood	31 (0)	32 (0)	31 (1)	30 (1)	33 (2)	31 (2)	32 (3)	34 (2)	32 (2)	31 (0)	34 (2)	33 (3)	27 (-1)	30 (-2)	29 (-1)

Table A.1 A-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Aeq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
131	Gittoes	32 (1)	33 (1)	32 (2)	30 (1)	33 (2)	31 (2)	32 (3)	34 (2)	32 (2)	31 (0)	34 (1)	33 (3)	27 (-1)	30 (-2)	29 (-1)
132	McLaughlin	32 (0)	34 (1)	32 (1)	30 (1)	34 (3)	31 (2)	32 (3)	34 (2)	33 (3)	31 (0)	35 (2)	33 (3)	27 (-1)	31 (-1)	30 (0)
137	George	32 (0)	33 (1)	32 (2)	30 (1)	33 (2)	31 (2)	32 (2)	34 (2)	33 (3)	31 (0)	35 (2)	33 (2)	28 (0)	31 (-1)	30 (1)
138	Re	33 (0)	33 (0)	32 (1)	30 (0)	33 (2)	31 (1)	33 (3)	34 (1)	33 (3)	31 (0)	35 (2)	34 (3)	28 (0)	31 (-2)	30 (0)
139	Logan	33 (1)	34 (1)	33 (2)	30 (1)	34 (3)	32 (2)	32 (2)	34 (2)	33 (3)	31 (0)	35 (2)	34 (3)	27 (-1)	31 (-1)	30 (0)
140	Logan	33 (1)	34 (1)	33 (1)	31 (2)	34 (3)	32 (2)	32 (3)	34 (2)	33 (3)	31 (0)	35 (1)	33 (2)	27 (-1)	31 (-1)	30 (0)
142A	Ewen	34 (1)	35 (1)	33 (1)	30 (0)	32 (0)	31 (1)	32 (3)	34 (1)	32 (2)	30 (0)	36 (3)	33 (2)	27 (-1)	31 (-2)	29 (-1)
142B	Ewen	33 (1)	34 (0)	33 (1)	31 (1)	34 (3)	32 (2)	33 (4)	35 (2)	33 (3)	31 (0)	35 (1)	33 (2)	27 (-2)	31 (-2)	29 (-2)
142C	Ewen	33 (1)	34 (0)	33 (1)	31 (1)	34 (3)	32 (2)	33 (4)	35 (3)	33 (3)	31 (0)	35 (1)	33 (2)	27 (-1)	31 (-2)	29 (-1)
143A	Lawson	33 (0)	35 (1)	34 (1)	31 (1)	32 (1)	30 (0)	31 (2)	33 (1)	31 (1)	30 (1)	35 (3)	33 (3)	27 (-1)	30 (-2)	29 (-1)
143B	Lawson	33 (1)	35 (1)	33 (1)	31 (1)	34 (2)	32 (2)	33 (4)	35 (2)	33 (2)	31 (0)	36 (1)	34 (2)	28 (-1)	32 (-1)	30 (-1)
144	Bevan	33 (1)	34 (1)	33 (1)	30 (1)	32 (0)	30 (0)	31 (3)	34 (2)	32 (2)	30 (1)	35 (3)	32 (3)	27 (-1)	30 (-1)	29 (-1)
145	Elsmore	34 (1)	36 (1)	34 (1)	31 (1)	32 (0)	31 (1)	32 (3)	33 (1)	32 (2)	30 (0)	34 (2)	32 (2)	27 (-1)	31 (0)	29 (0)
149	McInerney	42 (0)	42 (1)	41 (2)	35 (-1)	38 (0)	37 (1)	36 (2)	39 (2)	38 (3)	34 (0)	38 (0)	36 (1)	32 (-1)	36 (0)	34 (0)
153	Rath	29 (1)	32 (0)	31 (1)	26 (1)	32 (2)	30 (2)	27 (3)	34 (3)	31 (2)	25 (-1)	31 (0)	29 (-1)	23 (0)	30 (0)	29 (2)
154	Rath	30 (0)	32 (1)	31 (1)	32 (5)	32 (2)	31 (2)	33 (8)	34 (3)	32 (3)	26 (-2)	32 (0)	30 (0)	23 (0)	30 (1)	29 (2)
156B	Todhunter and Brook	31 (1)	33 (1)	31 (0)	29 (2)	33 (2)	31 (2)	30 (4)	34 (3)	33 (4)	27 (-1)	32 (0)	31 (1)	24 (0)	30 (1)	29 (2)
156w	Todhunter and Brook	32 (1)	33 (1)	32 (1)	30 (2)	34 (2)	32 (2)	31 (3)	34 (2)	33 (3)	28 (0)	32 (0)	31 (1)	25 (1)	30 (1)	29 (2)

Table A.1 A-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Aeq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
160	Dwyer	34 (1)	35 (1)	34 (1)	32 (1)	34 (1)	34 (2)	32 (2)	35 (2)	34 (2)	29 (-2)	34 (1)	32 (0)	25 (-2)	30 (-1)	29 (0)
162	Lamaro	33 (0)	35 (1)	33 (1)	32 (3)	33 (1)	31 (1)	31 (2)	34 (2)	32 (1)	29 (0)	34 (2)	32 (2)	27 (-1)	30 (-2)	30 (0)
164	Sharrock	33 (0)	34 (1)	33 (1)	31 (2)	33 (2)	31 (1)	32 (3)	34 (1)	33 (2)	32 (1)	36 (3)	35 (4)	28 (-1)	31 (-2)	30 (-2)
165	Garton	33 (1)	35 (1)	33 (1)	31 (1)	35 (3)	33 (3)	33 (4)	36 (3)	34 (3)	32 (0)	36 (1)	35 (3)	28 (-2)	32 (-1)	31 (-1)
169A	McCraw	33 (1)	34 (1)	33 (1)	31 (2)	33 (2)	31 (1)	32 (3)	34 (2)	33 (3)	30 (0)	34 (2)	33 (2)	27 (-1)	30 (-1)	29 (-1)
169e	McCraw	33 (0)	35 (1)	33 (1)	32 (3)	33 (1)	31 (1)	31 (2)	34 (2)	33 (2)	29 (0)	34 (2)	32 (2)	27 (-1)	30 (-2)	29 (-2)
170	Owens	33 (1)	34 (1)	33 (1)	31 (2)	33 (2)	31 (1)	32 (3)	33 (1)	32 (2)	30 (0)	34 (2)	33 (2)	27 (-1)	31 (0)	29 (-1)
171	Owens	33 (0)	35 (2)	33 (1)	32 (2)	33 (1)	32 (2)	32 (3)	34 (2)	33 (3)	30 (0)	34 (2)	33 (2)	27 (-1)	30 (-2)	29 (-2)
174	Kastelic	32 (0)	34 (1)	32 (1)	30 (1)	33 (2)	31 (2)	32 (4)	33 (1)	32 (2)	32 (2)	35 (2)	34 (3)	27 (-1)	31 (0)	29 (-1)
175	Grapemen Holdings Pty Limited	33 (1)	34 (1)	33 (1)	31 (2)	33 (2)	32 (3)	31 (2)	33 (1)	32 (2)	30 (0)	35 (2)	34 (3)	27 (-2)	31 (-1)	30 (-1)
176	Grapemen Holdings Pty Limited	32 (0)	34 (1)	33 (2)	31 (2)	33 (2)	32 (3)	31 (3)	34 (2)	33 (3)	31 (1)	35 (2)	34 (3)	27 (-1)	31 (-1)	30 (-1)
177B	Tulloch	32 (1)	33 (1)	33 (2)	30 (1)	32 (0)	31 (1)	32 (4)	34 (3)	33 (3)	31 (0)	34 (1)	34 (3)	26 (-2)	30 (-1)	30 (0)
177A	Tulloch	32 (0)	34 (2)	33 (2)	30 (1)	32 (0)	31 (1)	32 (4)	33 (2)	33 (3)	30 (-1)	34 (1)	33 (2)	26 (-2)	30 (-2)	30 (0)
179	Brooks and Thompson	34 (0)	36 (2)	34 (1)	33 (3)	34 (2)	33 (2)	32 (2)	35 (2)	34 (2)	31 (0)	34 (1)	33 (1)	28 (-1)	31 (-3)	30 (-2)
183	Foster	33 (0)	34 (1)	33 (1)	32 (2)	33 (2)	32 (2)	32 (3)	34 (2)	33 (2)	31 (0)	35 (2)	34 (3)	27 (-2)	31 (-1)	30 (-1)
184	Esslemont Family Holdings PTY Limited	33 (0)	35 (2)	33 (1)	32 (2)	33 (2)	33 (3)	32 (3)	34 (2)	34 (3)	30 (-1)	35 (2)	34 (2)	27 (-2)	31 (-1)	30 (-2)

Table A.1 A-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Aeq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
185	Poulos	33 (0)	34 (1)	33 (1)	31 (1)	33 (2)	32 (2)	32 (3)	34 (2)	33 (3)	30 (-1)	34 (1)	34 (2)	27 (-2)	31 (-1)	30 (-1)
188C	Tulloch	33 (1)	34 (1)	33 (1)	31 (2)	32 (0)	32 (2)	32 (3)	34 (2)	33 (3)	30 (-1)	34 (1)	33 (2)	26 (-3)	31 (-1)	30 (-1)
188A	Tulloch	32 (0)	34 (2)	33 (2)	31 (2)	32 (0)	32 (2)	32 (3)	33 (1)	32 (2)	30 (-1)	34 (1)	33 (2)	26 (-3)	31 (-1)	30 (-1)
188B	Tulloch	33 (1)	34 (1)	33 (1)	31 (2)	32 (0)	32 (2)	32 (3)	34 (2)	33 (3)	30 (-1)	34 (1)	33 (2)	26 (-3)	31 (-1)	30 (-1)
190	Gallagher	30 (0)	33 (1)	32 (1)	29 (-1)	32 (0)	32 (1)	30 (2)	33 (0)	32 (1)	29 (-1)	33 (0)	32 (0)	25 (-1)	29 (-1)	28 (-2)
191	Robards and Myers	31 (0)	33 (1)	32 (1)	29 (-2)	33 (1)	32 (1)	30 (1)	34 (1)	33 (1)	29 (-1)	33 (0)	32 (0)	25 (-2)	29 (-1)	28 (-2)
192	Carr	31 (0)	33 (1)	32 (1)	29 (-1)	33 (1)	32 (1)	30 (1)	33 (0)	33 (2)	29 (-1)	32 (-1)	32 (0)	25 (-2)	29 (-1)	28 (-2)
193	Britten and Herlihy	30 (0)	32 (0)	32 (1)	29 (-1)	32 (1)	32 (1)	30 (2)	33 (1)	32 (1)	29 (0)	32 (0)	31 (0)	25 (-1)	28 (-1)	28 (-1)
194	Smith	12 (1)	12 (0)	12 (1)	11 (0)	12 (0)	11 (0)	11 (1)	11 (0)	11 (1)	10 (0)	10 (-1)	10 (0)	10 (0)	10 (0)	10 (0)
195	Kennedy	35 (0)	34 (0)	34 (1)	32 (0)	34 (1)	33 (1)	32 (2)	34 (-2)	34 (0)	30 (0)	36 (3)	34 (2)	25 (0)	30 (-3)	29 (-3)
197	Kennedy	34 (1)	34 (1)	34 (2)	33 (0)	33 (1)	32 (1)	31 (1)	34 (1)	33 (1)	32 (1)	35 (1)	34 (1)	26 (-2)	31 (-2)	30 (-3)
198	Orton	32 (0)	34 (0)	34 (1)	30 (-2)	33 (0)	31 (-1)	31 (2)	34 (1)	33 (1)	30 (0)	34 (0)	33 (0)	26 (-2)	30 (-2)	30 (-1)
199	Gould	32 (1)	33 (0)	33 (1)	30 (-1)	33 (1)	32 (1)	31 (2)	34 (1)	33 (2)	30 (0)	33 (-1)	33 (0)	25 (-2)	30 (-1)	29 (-2)
200	Benchhoam	32 (0)	34 (1)	33 (1)	29 (-3)	33 (0)	31 (-1)	31 (1)	34 (0)	33 (1)	30 (0)	33 (0)	33 (1)	26 (-2)	30 (-1)	29 (-2)
202	Lakayev	30 (0)	32 (0)	32 (1)	29 (-1)	33 (1)	32 (1)	29 (1)	33 (0)	32 (1)	29 (1)	31 (-1)	31 (0)	24 (-1)	28 (-1)	27 (-2)
203	Schipper	31 (1)	33 (1)	32 (1)	29 (-1)	33 (1)	32 (1)	30 (1)	33 (0)	33 (1)	29 (0)	32 (-1)	32 (0)	26 (-1)	29 (-1)	28 (-1)
204	Leonard	27 (1)	27 (1)	26 (0)	24 (0)	26 (1)	25 (0)	24 (1)	26 (0)	25 (0)	24 (3)	27 (3)	26 (3)	16 (-2)	20 (-2)	19 (-2)
206	Helliker	27 (1)	26 (0)	26 (1)	24 (0)	26 (1)	25 (0)	24 (1)	26 (0)	25 (0)	24 (2)	27 (2)	27 (3)	17 (-2)	21 (-3)	20 (-3)

Table A.1 A-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Aeq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
207	Carr Thompson and Shearim	27 (1)	26 (1)	25 (0)	24 (0)	26 (1)	25 (1)	24 (1)	25 (-1)	25 (0)	24 (2)	28 (3)	27 (3)	17 (-1)	21 (-4)	20 (-3)
208	Leslie	27 (1)	26 (1)	25 (0)	25 (1)	26 (1)	25 (1)	24 (1)	25 (-1)	25 (0)	24 (2)	27 (2)	27 (3)	17 (-2)	21 (-4)	20 (-4)
209	Leslie	26 (0)	26 (1)	25 (0)	25 (1)	26 (1)	25 (1)	24 (1)	25 (-1)	25 (0)	25 (3)	27 (3)	27 (3)	17 (-2)	21 (-4)	20 (-4)
211	Brennan	32 (0)	34 (1)	33 (1)	29 (-2)	33 (0)	32 (0)	31 (1)	34 (0)	33 (0)	30 (0)	33 (0)	33 (1)	26 (-2)	29 (-2)	29 (-1)
212	Icelink PTY Limited	32 (0)	34 (0)	33 (0)	29 (-3)	33 (-1)	32 (-1)	31 (0)	34 (-1)	33 (-1)	30 (0)	33 (0)	33 (0)	27 (-1)	29 (-2)	29 (-1)
213	Icelink PTY Limited	30 (0)	33 (1)	32 (0)	28 (-3)	33 (1)	31 (-1)	30 (0)	33 (0)	32 (-1)	30 (1)	32 (-1)	32 (0)	26 (-1)	28 (-2)	28 (-1)
214	Sydney Gas Operations PTY Ltd	29 (0)	32 (0)	31 (0)	28 (-2)	32 (1)	31 (0)	29 (-1)	32 (0)	32 (0)	29 (0)	31 (-1)	31 (0)	26 (0)	28 (0)	27 (-1)
217s	Russell	36 (2)	36 (1)	35 (1)	32 (-1)	33 (-1)	32 (-1)	32 (1)	34 (0)	34 (1)	32 (1)	36 (2)	36 (3)	26 (-1)	32 (-2)	31 (-3)
217m	Russell	36 (1)	35 (1)	34 (1)	30 (-2)	32 (-1)	32 (0)	30 (0)	33 (1)	33 (1)	32 (3)	35 (2)	35 (3)	26 (-1)	32 (-1)	32 (-1)
217n	Russell	37 (2)	37 (3)	36 (3)	31 (-3)	31 (-4)	31 (-1)	33 (4)	32 (-2)	32 (-1)	28 (-2)	35 (2)	34 (1)	22 (-4)	30 (-3)	29 (-3)
220	Purser and Keayes	33 (1)	35 (0)	35 (1)	30 (-2)	34 (0)	33 (0)	31 (2)	34 (-1)	34 (0)	31 (0)	33 (0)	33 (0)	26 (-1)	29 (-1)	29 (-1)
221	Brasington	32 (1)	34 (0)	34 (1)	30 (-1)	34 (0)	33 (0)	31 (1)	33 (-2)	33 (-1)	30 (0)	33 (0)	33 (1)	27 (0)	29 (-1)	29 (0)
222	Vassallo	33 (0)	36 (1)	35 (0)	30 (-2)	34 (-1)	33 (-1)	32 (3)	34 (-2)	34 (-1)	31 (-1)	34 (0)	34 (0)	26 (-2)	30 (0)	30 (0)
223	Jackson	33 (1)	35 (0)	35 (1)	30 (-2)	34 (-1)	34 (0)	32 (3)	34 (-1)	34 (-1)	31 (0)	33 (-1)	33 (0)	27 (-1)	30 (0)	29 (0)
225	Harris	30 (1)	32 (1)	32 (1)	30 (1)	32 (0)	32 (1)	30 (2)	32 (1)	32 (1)	29 (0)	31 (0)	31 (0)	26 (-1)	28 (0)	28 (0)
226	Vassallo	34 (1)	36 (0)	36 (1)	31 (-2)	34 (-1)	34 (-1)	32 (3)	34 (-2)	34 (-1)	31 (-1)	34 (0)	34 (0)	26 (-2)	30 (0)	30 (0)
227	Beavis	33 (0)	36 (1)	35 (0)	31 (-1)	34 (-1)	34 (0)	32 (3)	34 (-1)	34 (-1)	31 (-1)	34 (0)	34 (0)	26 (-2)	30 (0)	29 (-1)

Table A.1 A-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Aeq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
228	Lamb	34 (1)	36 (0)	35 (0)	31 (-1)	34 (-1)	34 (0)	33 (4)	34 (-2)	34 (-1)	31 (-1)	34 (0)	34 (0)	26 (-2)	30 (0)	30 (0)
229	Ritchie	34 (1)	36 (1)	35 (0)	31 (-1)	34 (-1)	34 (0)	33 (4)	34 (-2)	34 (-1)	31 (-1)	34 (0)	34 (1)	27 (-1)	30 (0)	29 (-1)
230	Cant	34 (0)	37 (1)	36 (0)	32 (-1)	35 (-1)	35 (0)	34 (5)	35 (-2)	35 (-1)	32 (-1)	35 (0)	34 (0)	27 (-1)	30 (0)	30 (0)
231	Dawson	34 (1)	36 (0)	35 (0)	32 (-1)	35 (0)	35 (1)	33 (3)	34 (-2)	34 (-1)	31 (0)	34 (0)	34 (1)	27 (-1)	30 (0)	30 (0)
232	Medhurst	35 (1)	37 (0)	37 (1)	32 (-2)	36 (-1)	36 (0)	34 (4)	35 (-2)	35 (-1)	32 (0)	35 (1)	35 (1)	28 (0)	32 (1)	32 (1)
233	Vikas	35 (1)	36 (0)	36 (0)	32 (-1)	35 (-1)	35 (0)	34 (4)	35 (-2)	35 (-1)	32 (0)	35 (0)	34 (0)	27 (-1)	31 (0)	31 (0)
234	Thompson	35 (1)	37 (1)	36 (0)	32 (-2)	36 (0)	35 (-1)	33 (2)	35 (-2)	34 (-2)	31 (-1)	35 (1)	34 (0)	27 (-1)	31 (0)	31 (0)
235	Caban	34 (0)	36 (0)	36 (1)	32 (-2)	35 (-1)	35 (0)	33 (1)	34 (-2)	34 (-1)	30 (-1)	34 (0)	34 (0)	27 (-1)	30 (0)	30 (0)
236	Krey	33 (0)	35 (0)	35 (0)	31 (-2)	34 (-1)	34 (-1)	33 (1)	33 (-2)	33 (-2)	30 (-1)	33 (0)	33 (0)	27 (0)	30 (0)	30 (0)
237	Ryan and Harrison	34 (0)	36 (0)	36 (0)	32 (-2)	36 (0)	36 (0)	33 (2)	34 (-2)	34 (-2)	31 (-1)	34 (0)	34 (0)	28 (0)	31 (1)	31 (0)
238	Topham	33 (0)	35 (0)	35 (0)	32 (-1)	35 (0)	35 (0)	33 (1)	34 (-1)	34 (-1)	30 (-1)	33 (0)	33 (0)	27 (0)	30 (0)	30 (0)
239	Waters	34 (0)	36 (0)	36 (0)	30 (-3)	33 (-2)	33 (-2)	31 (2)	32 (-4)	32 (-3)	30 (1)	33 (3)	33 (3)	24 (-2)	27 (-1)	27 (-1)
240	Godyn	34 (0)	36 (0)	36 (0)	31 (-3)	36 (0)	36 (0)	33 (2)	34 (-2)	34 (-2)	31 (-1)	34 (0)	34 (0)	28 (0)	31 (1)	31 (1)
241	Kaizer	33 (0)	36 (0)	35 (0)	31 (-2)	35 (0)	35 (0)	32 (1)	34 (-1)	34 (-1)	30 (-1)	33 (0)	33 (0)	27 (-1)	30 (0)	30 (0)
242	Bridge	33 (0)	35 (0)	35 (0)	31 (-2)	35 (0)	35 (0)	32 (1)	33 (-1)	33 (-1)	30 (-1)	33 (0)	33 (0)	27 (0)	30 (1)	30 (1)
243	Neville	33 (0)	35 (-1)	35 (0)	31 (-1)	35 (1)	35 (1)	32 (1)	33 (-1)	33 (-1)	30 (-1)	33 (0)	33 (0)	27 (0)	30 (1)	30 (1)
244	Caban	32 (0)	34 (-1)	34 (-1)	30 (-2)	34 (0)	34 (0)	31 (1)	33 (0)	33 (0)	29 (-2)	32 (0)	32 (0)	27 (0)	29 (1)	29 (0)
247	Upward	31 (0)	33 (-1)	33 (-1)	30 (-1)	33 (0)	33 (0)	30 (0)	32 (-1)	32 (-1)	29 (-1)	31 (0)	31 (0)	26 (0)	28 (0)	28 (0)

Table A.1 A-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Aeq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
250	Icelink PTY Limited	32 (1)	35 (1)	34 (1)	30 (-1)	34 (0)	33 (0)	31 (1)	33 (-2)	33 (-1)	31 (1)	33 (0)	33 (0)	27 (0)	29 (-1)	29 (-1)
254	Mitchell	32 (0)	35 (-1)	35 (-1)	31 (-2)	35 (1)	35 (1)	32 (2)	33 (-1)	33 (-1)	30 (-1)	32 (0)	32 (0)	27 (0)	29 (0)	29 (0)
256	Cameron	32 (0)	34 (-2)	34 (-2)	30 (-2)	34 (0)	34 (0)	31 (1)	33 (0)	33 (0)	30 (-1)	32 (1)	32 (0)	27 (1)	28 (0)	28 (0)
261	Smith	33 (0)	36 (0)	36 (0)	32 (-2)	36 (1)	36 (1)	33 (2)	34 (0)	34 (-1)	31 (-1)	34 (1)	34 (1)	27 (0)	30 (1)	30 (1)
262	Smith	33 (0)	36 (0)	36 (0)	32 (-2)	36 (1)	36 (1)	33 (2)	34 (0)	34 (-1)	31 (-1)	33 (0)	33 (0)	27 (0)	30 (1)	30 (1)
263	Reid	33 (0)	36 (0)	36 (0)	32 (-1)	36 (1)	36 (1)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (0)	33 (0)	27 (0)	30 (1)	30 (1)
264	Reid	33 (0)	36 (0)	36 (0)	32 (-1)	36 (1)	36 (1)	33 (2)	34 (-1)	34 (-1)	31 (-1)	33 (0)	33 (0)	27 (0)	30 (1)	30 (1)
265	Turnbull	33 (0)	35 (-1)	35 (0)	32 (-2)	36 (1)	36 (1)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (0)	33 (0)	27 (0)	29 (0)	29 (0)
266	Hedley and Louis	33 (0)	35 (-1)	35 (0)	32 (-2)	36 (1)	36 (1)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (0)	27 (0)	29 (0)	29 (0)
267	Powis	33 (0)	35 (0)	35 (0)	32 (-2)	35 (0)	35 (0)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (1)	27 (0)	29 (0)	29 (0)
272	Bulga Community Centre Incorporated	33 (0)	35 (-1)	35 (-1)	32 (-2)	36 (1)	36 (1)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (0)	27 (0)	29 (0)	29 (0)
273	Silk	33 (0)	35 (0)	35 (0)	32 (-2)	35 (0)	35 (0)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (0)	27 (0)	29 (0)	29 (0)
274	Messrs Dragicevic	33 (0)	35 (-1)	35 (-1)	32 (-2)	35 (0)	35 (0)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (1)	27 (0)	29 (0)	29 (0)
275	Dragicevic	33 (0)	35 (0)	35 (0)	32 (-2)	35 (1)	35 (0)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (1)	27 (0)	29 (0)	29 (0)
276	Cooke	33 (0)	35 (-1)	35 (-1)	32 (-2)	35 (1)	35 (0)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (1)	26 (-1)	29 (0)	29 (0)
277	Grainger	33 (0)	35 (0)	35 (0)	32 (-2)	35 (1)	35 (0)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (1)	26 (-1)	29 (0)	29 (0)
279	Bendall	33 (0)	35 (-1)	35 (-1)	32 (-2)	35 (0)	35 (0)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (1)	27 (0)	29 (0)	29 (0)

Table A.1 A-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Aeq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
280	Magin	33 (1)	35 (-1)	35 (0)	32 (-2)	35 (0)	35 (0)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (1)	27 (0)	29 (0)	29 (0)
281	Harris and Ferguson	33 (1)	35 (0)	35 (0)	32 (-2)	35 (0)	35 (0)	32 (1)	34 (0)	34 (0)	31 (-1)	33 (1)	33 (1)	27 (0)	29 (0)	29 (0)
283	Saunders	32 (0)	35 (0)	35 (0)	32 (-1)	35 (0)	35 (1)	32 (1)	33 (-1)	33 (-1)	30 (-2)	33 (1)	33 (1)	26 (-1)	29 (0)	29 (0)
284	Nichols and Anderson	32 (0)	35 (0)	35 (0)	32 (-1)	35 (1)	35 (1)	32 (2)	33 (-1)	33 (-1)	30 (-1)	32 (0)	32 (0)	26 (-1)	29 (0)	29 (0)
285	Harris	32 (0)	35 (0)	35 (0)	32 (-1)	35 (1)	35 (1)	32 (2)	33 (-1)	33 (-1)	30 (-1)	32 (0)	32 (0)	26 (-1)	29 (1)	29 (0)
286	McLachlan	32 (0)	35 (0)	35 (0)	32 (-1)	35 (1)	35 (1)	32 (2)	33 (-1)	33 (-1)	30 (-1)	32 (0)	32 (0)	26 (-1)	29 (1)	29 (0)
287	McLaughlin	32 (0)	35 (0)	35 (0)	32 (-1)	35 (1)	35 (1)	32 (2)	33 (-1)	33 (-1)	30 (-1)	32 (0)	32 (0)	26 (-1)	29 (1)	29 (0)
288	Ford	33 (1)	35 (-1)	35 (-1)	32 (-2)	35 (1)	35 (1)	32 (1)	34 (0)	34 (0)	30 (-2)	33 (1)	33 (1)	26 (-1)	29 (0)	29 (0)
289	Pringle	32 (0)	34 (-1)	34 (-1)	31 (-2)	34 (0)	34 (0)	31 (1)	33 (0)	33 (-1)	30 (-1)	32 (1)	32 (0)	26 (0)	28 (0)	28 (0)
290	Janse van Rensburg	32 (0)	34 (-1)	34 (-1)	31 (-2)	34 (0)	34 (0)	31 (1)	33 (0)	33 (-1)	30 (-1)	32 (1)	32 (0)	26 (0)	28 (0)	28 (-1)
291	Adamthwaite	32 (0)	34 (-1)	34 (-1)	31 (-2)	34 (0)	34 (0)	31 (1)	33 (0)	33 (0)	30 (-1)	32 (1)	32 (1)	26 (0)	28 (0)	28 (0)
292	Evans	32 (0)	35 (0)	35 (0)	31 (-2)	34 (0)	34 (0)	32 (2)	33 (0)	33 (0)	30 (-1)	32 (0)	32 (0)	26 (0)	28 (-1)	28 (-1)
293	Gallagher	32 (0)	34 (-1)	34 (-1)	31 (-2)	34 (0)	34 (0)	31 (1)	33 (0)	33 (0)	30 (-1)	32 (1)	32 (1)	26 (0)	28 (0)	28 (-1)
294	Brown	32 (0)	34 (-2)	34 (-1)	31 (-2)	34 (0)	34 (0)	31 (1)	33 (0)	33 (0)	30 (-1)	32 (1)	32 (0)	26 (0)	28 (0)	28 (0)
295	Carnevale Testa Angelatos	32 (1)	34 (-1)	34 (-1)	31 (-2)	34 (0)	34 (0)	31 (1)	33 (0)	33 (0)	30 (-1)	32 (1)	32 (1)	26 (0)	28 (0)	28 (0)
296	Burgess	32 (1)	34 (-1)	34 (-1)	31 (-1)	34 (1)	34 (1)	31 (1)	32 (-1)	32 (-1)	30 (-1)	31 (0)	31 (0)	26 (0)	28 (0)	28 (0)
297	Fogwell	32 (1)	34 (-1)	34 (-1)	31 (-1)	34 (1)	34 (1)	31 (1)	32 (-1)	32 (-1)	30 (-1)	31 (0)	31 (0)	26 (0)	28 (0)	28 (0)

Table A.1 A-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Aeq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
298	Player	29 (-1)	32 (-1)	32 (-1)	28 (0)	30 (0)	30 (0)	28 (3)	29 (-1)	29 (-1)	24 (0)	26 (2)	26 (2)	21 (-1)	23 (0)	23 (0)
300	Price	27 (0)	27 (1)	27 (1)	23 (-1)	25 (1)	25 (1)	23 (2)	25 (1)	25 (1)	23 (0)	26 (3)	26 (3)	18 (-2)	21 (-1)	21 (-1)
301	Powell and Shannon	27 (0)	26 (0)	26 (0)	22 (-2)	24 (1)	24 (1)	23 (3)	25 (3)	25 (3)	22 (-1)	25 (2)	25 (2)	18 (-1)	21 (0)	21 (0)
302	Harrison	28 (1)	28 (2)	28 (2)	26 (1)	28 (1)	28 (1)	26 (3)	27 (2)	27 (2)	23 (0)	26 (1)	26 (1)	19 (-2)	22 (-1)	22 (-2)
303	McKenzie	30 (1)	32 (1)	32 (1)	28 (1)	30 (1)	30 (1)	29 (4)	30 (1)	30 (1)	28 (0)	30 (2)	30 (1)	23 (-1)	25 (0)	25 (0)
304	Banks	30 (0)	33 (-1)	33 (-1)	30 (-1)	32 (0)	32 (0)	30 (1)	31 (-1)	31 (-1)	29 (-1)	30 (0)	30 (0)	25 (0)	27 (0)	27 (0)
305	Anderson	30 (0)	32 (-1)	32 (-1)	30 (-1)	32 (0)	32 (0)	30 (1)	31 (-1)	31 (-1)	29 (-1)	30 (0)	30 (0)	25 (0)	27 (0)	27 (0)
306	Gregory	32 (0)	35 (0)	35 (0)	31 (-2)	35 (1)	34 (0)	32 (1)	33 (0)	33 (-1)	30 (-1)	32 (0)	32 (0)	26 (0)	28 (-1)	28 (-1)
307	Mobberley	34 (0)	36 (-1)	36 (-1)	32 (-2)	36 (0)	36 (0)	32 (2)	35 (0)	35 (0)	30 (-2)	34 (1)	34 (1)	25 (-2)	31 (1)	31 (1)
308	Renaud	33 (0)	35 (-1)	35 (-1)	32 (-2)	35 (0)	35 (0)	32 (1)	35 (1)	35 (1)	30 (-1)	33 (1)	33 (1)	25 (-2)	30 (0)	30 (0)
309	Louis	31 (0)	33 (-1)	33 (-1)	30 (-2)	33 (1)	33 (0)	30 (0)	32 (-1)	32 (-1)	29 (-1)	31 (1)	31 (1)	25 (0)	27 (0)	27 (0)
311	Mulally McMaugh Burke	32 (-1)	34 (-2)	34 (-3)	31 (-2)	35 (1)	35 (1)	31 (2)	34 (0)	34 (0)	29 (-2)	33 (1)	32 (0)	24 (-2)	30 (0)	30 (0)
314	Hanson	31 (0)	33 (-1)	33 (-1)	30 (-2)	32 (0)	32 (0)	30 (0)	32 (0)	32 (0)	29 (-1)	31 (1)	31 (1)	25 (0)	27 (0)	27 (0)
316B	Caban	31 (0)	33 (-1)	33 (-1)	30 (-2)	33 (1)	33 (0)	30 (0)	32 (0)	32 (-1)	29 (-1)	31 (1)	31 (1)	25 (0)	27 (-1)	27 (-1)
316A	Caban	30 (-1)	33 (-1)	33 (-1)	30 (-2)	32 (0)	32 (0)	30 (1)	32 (0)	32 (0)	28 (-1)	30 (0)	30 (0)	25 (0)	27 (0)	27 (0)
317	Lancaster	30 (-1)	33 (-1)	33 (-1)	30 (-2)	33 (1)	33 (1)	30 (1)	32 (-1)	32 (-1)	29 (0)	31 (1)	31 (1)	24 (-1)	28 (0)	28 (0)
319B	Estvale Holdings Pty Ltd	33 (1)	35 (2)	33 (2)	32 (2)	34 (2)	33 (2)	31 (4)	33 (1)	33 (3)	28 (-1)	32 (0)	32 (2)	25 (0)	31 (1)	30 (2)
319A	Estvale Holdings Pty Ltd	32 (0)	35 (1)	34 (3)	32 (2)	34 (1)	34 (3)	31 (3)	34 (1)	33 (3)	28 (-1)	32 (0)	32 (2)	25 (0)	32 (2)	30 (2)

Table A.1 A-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Aeq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
323	Poulsen	31 (0)	33 (0)	34 (1)	35 (3)	37 (4)	37 (3)	33 (-2)	35 (-1)	35 (-1)	30 (-1)	31 (-2)	32 (-1)	29 (-2)	31 (-2)	32 (-1)
324	Wood	28 (1)	31 (1)	32 (1)	33 (5)	35 (4)	36 (4)	30 (-3)	32 (-2)	33 (-1)	25 (-1)	28 (1)	29 (1)	23 (-3)	27 (-1)	28 (-1)
325	Ancich	31 (0)	33 (1)	34 (1)	34 (3)	36 (3)	37 (3)	31 (-3)	34 (-2)	35 (-1)	28 (-3)	31 (-2)	32 (-2)	25 (-6)	30 (-3)	31 (-3)
326	McNaught	27 (0)	26 (1)	26 (1)	21 (-3)	24 (2)	24 (2)	22 (2)	24 (2)	24 (2)	21 (0)	24 (2)	24 (2)	16 (-2)	19 (-1)	19 (-2)
1A	Hedley	33 (1)	35 (1)	35 (0)	36 (2)	38 (3)	38 (2)	33 (-1)	35 (-1)	35 (-1)	29 (-1)	32 (1)	32 (1)	27 (-2)	30 (-2)	30 (-2)
1B	Cant	34 (0)	36 (0)	36 (1)	31 (-2)	35 (-1)	34 (-1)	33 (4)	35 (-2)	35 (-1)	31 (-2)	34 (-1)	34 (0)	27 (-1)	30 (0)	30 (0)
8	Marland	32 (0)	34 (0)	35 (0)	36 (4)	38 (4)	38 (3)	32 (-4)	34 (-3)	35 (-3)	27 (-6)	31 (-4)	32 (-4)	25 (-7)	30 (-5)	31 (-4)

Note: 1. Receptor 149 currently has rights to acquisition upon request;

2. Bolded results denote predicted result exceeds PSNC;

3. Bracketed results indicate change relative to EIS.

APPENDIX

B. LOW FREQUENCY OPERATIONAL NOISE RESULTS

Table B.2 presents total C-weighted predictions for all assessed NSR. Bolded results exceed the relevant Broner criterion (if applicable). Bracketed results indicate the change in predictions relative to the EIS NIA.

Table B.3 presents total C-weighted minus A-weighted (C minus A) predictions for all assessed NSR. Bolded results indicate the C minus A results that are greater than or equal to 15 dB, and, have a total A-weighted prediction greater than L_{Aeq} , 15 minute 30 dB. Bracketed results indicate the corresponding predicted L_{Aeq} , 15 minute level.

Table B.2 C-WEIGHTED OPERATIONAL NOISE LEVELS L_{Ceq} , 15 minute dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
1A	Hedley	45 (1)	48 (2)	48 (1)	48 (2)	50 (4)	50 (3)	46 (0)	49 (2)	49 (1)	43 (0)	46 (1)	46 (1)	41 (-2)	44 (-1)	44 (-2)
1B	Cant	47 (1)	49 (1)	49 (1)	46 (0)	48 (0)	48 (1)	47 (3)	49 (1)	49 (1)	46 (0)	48 (1)	48 (1)	42 (-1)	45 (1)	45 (1)
8	Marland	43 (0)	45 (1)	45 (0)	46 (3)	47 (3)	48 (3)	45 (-1)	46 (-1)	47 (0)	42 (-3)	44 (-2)	45 (-2)	40 (-4)	43 (-3)	44 (-3)
20A	Bosco	47 (1)	49 (1)	48 (1)	44 (-1)	47 (0)	47 (0)	43 (1)	46 (0)	46 (1)	42 (2)	46 (1)	46 (1)	39 (0)	44 (-1)	44 (0)
20B	Bosco	47 (1)	49 (1)	48 (1)	44 (-1)	47 (0)	47 (0)	43 (1)	46 (0)	46 (1)	42 (2)	46 (1)	46 (1)	39 (0)	44 (-1)	44 (0)
21	Rogers	45 (0)	48 (0)	48 (1)	43 (0)	47 (0)	47 (1)	42 (1)	46 (1)	46 (1)	41 (2)	45 (0)	45 (1)	38 (0)	44 (0)	44 (0)
23	Hungerford	40 (-2)	45 (0)	44 (0)	38 (0)	44 (1)	43 (1)	36 (-1)	43 (-2)	42 (-2)	35 (-2)	41 (-3)	40 (-3)	30 (-7)	40 (-4)	39 (-4)
33	Stevens and Company Pty Limited	39 (1)	40 (1)	39 (1)	35 (0)	39 (1)	38 (2)	36 (3)	40 (1)	39 (4)	33 (0)	36 (-1)	35 (2)	30 (-1)	34 (-4)	33 (1)
37	Earl	36 (1)	36 (1)	35 (1)	33 (0)	36 (1)	34 (1)	33 (1)	36 (0)	35 (2)	33 (1)	36 (2)	34 (2)	30 (-1)	33 (0)	32 (1)
38	Parkes	41 (0)	42 (0)	41 (2)	38 (1)	42 (0)	41 (3)	39 (3)	42 (-1)	42 (4)	37 (1)	43 (1)	40 (3)	33 (-1)	42 (2)	39 (3)
41	Darcy Byron Pty Ltd	43 (0)	47 (1)	47 (3)	44 (2)	47 (1)	47 (3)	43 (0)	46 (0)	46 (1)	41 (0)	44 (0)	44 (1)	38 (0)	43 (-1)	43 (2)
46	Gleave	44 (0)	47 (0)	47 (2)	44 (1)	47 (1)	47 (2)	43 (0)	46 (0)	46 (1)	41 (-1)	44 (0)	44 (1)	39 (0)	44 (0)	43 (1)

Table B.2 C-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Ceq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
55	Crow	44 (0)	48 (1)	47 (2)	43 (0)	47 (1)	47 (2)	43 (0)	46 (0)	46 (1)	43 (1)	45 (0)	45 (1)	40 (0)	44 (0)	44 (2)
56	Lambkin	44 (0)	47 (0)	47 (2)	44 (1)	47 (1)	47 (3)	43 (0)	46 (0)	46 (1)	42 (-1)	45 (0)	45 (1)	40 (0)	44 (0)	43 (1)
57	Rogers	44 (0)	47 (0)	46 (1)	44 (1)	47 (1)	47 (3)	43 (0)	46 (0)	46 (1)	42 (0)	44 (-1)	44 (1)	39 (-1)	44 (0)	43 (1)
58	Stafa	44 (0)	48 (1)	47 (2)	44 (1)	47 (1)	47 (3)	43 (0)	46 (0)	46 (1)	42 (-1)	45 (0)	45 (1)	40 (0)	44 (0)	43 (1)
60	Poile	44 (0)	47 (0)	47 (2)	43 (0)	47 (1)	47 (2)	43 (0)	46 (0)	46 (1)	42 (-1)	45 (0)	44 (0)	40 (-1)	44 (0)	43 (1)
61	Larkin	44 (0)	47 (0)	47 (2)	44 (1)	47 (1)	47 (2)	44 (1)	46 (0)	46 (1)	42 (-1)	45 (0)	45 (1)	39 (-2)	43 (-1)	43 (1)
62	Sanger	44 (0)	48 (1)	48 (3)	44 (1)	47 (1)	47 (2)	43 (0)	46 (0)	46 (1)	42 (-1)	45 (0)	45 (1)	39 (-2)	43 (-1)	43 (1)
63	O'Toole	44 (0)	48 (1)	48 (3)	44 (1)	47 (1)	47 (2)	43 (0)	46 (0)	46 (1)	42 (-1)	45 (0)	45 (1)	40 (-1)	43 (-1)	43 (1)
71	Garth	44 (0)	47 (0)	47 (2)	44 (1)	47 (1)	47 (2)	44 (1)	47 (1)	46 (1)	43 (0)	46 (1)	45 (1)	40 (1)	44 (0)	44 (2)
72	Matley	44 (0)	48 (1)	47 (1)	43 (0)	47 (1)	47 (2)	43 (0)	46 (0)	46 (1)	43 (0)	45 (0)	45 (1)	40 (0)	44 (0)	44 (2)
73	Hebbe and Bush	44 (0)	48 (1)	47 (2)	43 (0)	47 (1)	47 (2)	43 (0)	46 (0)	46 (1)	43 (0)	46 (1)	45 (1)	40 (0)	44 (0)	44 (2)
74	Towers and Maviglia	44 (0)	47 (0)	47 (2)	43 (0)	47 (1)	47 (2)	43 (0)	46 (0)	46 (1)	43 (0)	45 (0)	45 (1)	40 (0)	44 (1)	44 (3)
76	Chaffey	44 (0)	47 (0)	47 (2)	43 (0)	47 (1)	47 (2)	43 (0)	46 (0)	46 (1)	42 (-1)	45 (0)	45 (1)	40 (0)	44 (1)	44 (3)
78	Smolenaers	44 (0)	47 (0)	47 (1)	43 (0)	47 (1)	47 (2)	43 (0)	46 (0)	46 (1)	43 (0)	45 (0)	45 (1)	40 (0)	44 (0)	44 (2)
80	Duggan	45 (1)	47 (0)	47 (1)	44 (1)	47 (1)	47 (2)	43 (-1)	46 (0)	46 (1)	41 (-2)	44 (0)	44 (1)	40 (-2)	43 (-1)	43 (0)
82	Mears	44 (0)	47 (1)	47 (2)	44 (1)	47 (2)	46 (2)	43 (-1)	46 (0)	46 (1)	42 (0)	44 (0)	44 (1)	40 (-1)	43 (-1)	43 (1)
83	Nightingale Vineyards PTY Limited	44 (0)	47 (1)	47 (2)	44 (1)	47 (2)	46 (2)	43 (0)	46 (0)	46 (2)	42 (0)	45 (1)	44 (0)	40 (-1)	43 (0)	43 (1)

Table B.2 C-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Ceq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
84	Stacey	44 (-1)	47 (0)	47 (1)	44 (1)	47 (1)	47 (2)	44 (1)	47 (1)	47 (2)	42 (-1)	45 (0)	45 (1)	41 (0)	44 (0)	43 (1)
85	Towns	45 (0)	47 (0)	47 (1)	44 (1)	47 (1)	47 (2)	44 (1)	47 (1)	47 (2)	42 (-1)	45 (0)	45 (1)	41 (0)	44 (0)	44 (2)
86	Richardson	44 (0)	46 (0)	46 (1)	43 (0)	46 (1)	45 (1)	44 (1)	47 (2)	46 (2)	43 (0)	46 (1)	45 (1)	41 (1)	44 (0)	44 (2)
87	Connolly	44 (0)	46 (0)	46 (1)	43 (0)	46 (1)	45 (1)	44 (1)	47 (2)	46 (2)	42 (0)	46 (2)	45 (2)	41 (1)	44 (0)	43 (1)
88	Ferguson	46 (0)	48 (1)	48 (2)	45 (0)	48 (1)	47 (1)	45 (1)	48 (2)	47 (2)	43 (0)	47 (1)	47 (2)	41 (0)	45 (0)	44 (1)
90	Tsiolkas	44 (0)	45 (0)	45 (1)	43 (1)	45 (1)	45 (2)	44 (2)	47 (2)	46 (2)	42 (-1)	46 (2)	45 (2)	40 (0)	44 (0)	43 (1)
91	Dunn and Wakeman	43 (0)	45 (1)	45 (2)	42 (0)	44 (0)	43 (1)	43 (0)	45 (0)	45 (1)	42 (0)	45 (2)	44 (2)	40 (0)	42 (-1)	42 (1)
93	Danks	46 (0)	49 (1)	48 (1)	45 (1)	48 (2)	47 (2)	46 (2)	48 (2)	48 (3)	43 (0)	47 (1)	47 (2)	41 (-1)	45 (0)	44 (1)
94	Rozene Pty Limited	46 (0)	48 (0)	48 (0)	45 (0)	48 (1)	48 (2)	45 (1)	48 (2)	48 (3)	43 (0)	47 (1)	46 (1)	41 (-1)	45 (0)	44 (1)
95	Rozene Pty Limited	46 (0)	49 (1)	48 (1)	45 (0)	48 (1)	47 (1)	46 (2)	48 (1)	48 (3)	43 (0)	48 (2)	47 (2)	41 (-1)	45 (0)	44 (1)
97	Lambkin	46 (0)	49 (1)	47 (1)	44 (0)	46 (0)	45 (1)	44 (1)	46 (0)	45 (1)	43 (1)	44 (0)	43 (0)	42 (0)	44 (0)	43 (0)
98	Fromberg	45 (0)	48 (1)	47 (1)	44 (1)	47 (2)	47 (3)	45 (2)	48 (2)	47 (3)	43 (0)	47 (2)	46 (2)	40 (-1)	45 (1)	44 (2)
100	Calcott-McKenzie	42 (0)	46 (1)	45 (1)	41 (1)	44 (1)	44 (3)	41 (3)	43 (1)	42 (2)	38 (1)	41 (0)	40 (2)	34 (-1)	39 (0)	38 (1)
101	Boustred Spence Turner and Cowan	45 (0)	48 (1)	48 (2)	44 (0)	47 (1)	47 (2)	44 (1)	48 (2)	47 (3)	43 (0)	47 (2)	46 (2)	41 (0)	44 (-1)	44 (1)
102	Morsillo	46 (0)	49 (1)	48 (1)	45 (1)	48 (2)	47 (2)	45 (1)	48 (2)	47 (2)	43 (0)	47 (2)	46 (2)	41 (-1)	45 (0)	44 (1)
103	Bell	46 (0)	49 (1)	48 (1)	45 (1)	48 (2)	47 (2)	46 (2)	48 (2)	47 (2)	43 (0)	47 (1)	46 (1)	41 (-1)	45 (0)	44 (1)
105A	Bird and T Lambkin	47 (1)	48 (1)	47 (1)	44 (1)	46 (1)	46 (2)	45 (1)	47 (1)	46 (1)	44 (1)	47 (2)	46 (2)	42 (0)	45 (0)	44 (1)

Table B.2 C-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Ceq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
105B	Bird and T Lambkin	45 (1)	47 (1)	46 (2)	43 (1)	45 (1)	45 (2)	44 (0)	47 (2)	46 (2)	43 (0)	47 (2)	46 (2)	42 (0)	44 (0)	43 (0)
105C	Bird and T Lambkin	47 (1)	48 (1)	47 (1)	44 (1)	46 (1)	46 (2)	45 (1)	47 (1)	46 (1)	44 (1)	47 (2)	46 (2)	42 (0)	45 (0)	44 (1)
108	Cowan	44 (0)	46 (1)	45 (1)	43 (1)	46 (2)	45 (2)	44 (1)	47 (2)	46 (2)	43 (0)	46 (1)	46 (3)	40 (-1)	44 (0)	43 (1)
109	Romke	44 (0)	46 (1)	46 (2)	43 (0)	46 (1)	46 (3)	45 (2)	47 (2)	46 (2)	43 (0)	46 (1)	46 (3)	40 (-1)	44 (0)	43 (1)
113B	Cowan	44 (0)	46 (1)	45 (1)	43 (1)	46 (2)	45 (2)	44 (2)	47 (2)	46 (2)	42 (-1)	46 (1)	45 (2)	40 (-1)	44 (0)	43 (1)
113A	Cowan	44 (1)	46 (1)	45 (1)	43 (1)	46 (2)	45 (2)	44 (2)	46 (1)	46 (2)	42 (0)	46 (1)	45 (2)	40 (-1)	43 (-1)	42 (0)
114	Palmer	45 (1)	47 (1)	47 (2)	44 (1)	47 (2)	46 (3)	45 (3)	47 (2)	47 (3)	43 (0)	47 (2)	46 (3)	40 (-1)	44 (0)	44 (2)
115	Goldfinch	44 (1)	46 (1)	45 (2)	44 (2)	46 (2)	46 (3)	44 (2)	47 (2)	46 (2)	43 (0)	46 (1)	46 (3)	40 (-1)	44 (0)	43 (1)
116	Houtzaager	44 (1)	46 (1)	45 (2)	43 (1)	46 (2)	45 (2)	44 (2)	47 (2)	46 (2)	42 (0)	46 (1)	45 (2)	40 (-1)	43 (-1)	43 (1)
117	Tolson	43 (0)	46 (2)	45 (2)	42 (1)	44 (1)	43 (1)	43 (1)	45 (1)	44 (1)	42 (1)	46 (3)	44 (2)	40 (-1)	42 (-1)	41 (0)
118	McManus	43 (1)	46 (2)	44 (2)	42 (2)	43 (0)	43 (2)	42 (0)	44 (0)	44 (1)	42 (1)	45 (2)	43 (1)	40 (0)	42 (0)	41 (0)
119	Hann-Devries	43 (1)	46 (1)	45 (2)	42 (2)	44 (2)	44 (3)	43 (2)	45 (1)	44 (2)	41 (0)	44 (1)	44 (3)	40 (0)	43 (2)	42 (2)
121B	Hope	43 (0)	45 (1)	44 (1)	43 (2)	46 (3)	45 (3)	45 (3)	47 (2)	46 (3)	42 (-1)	46 (2)	45 (2)	40 (-1)	43 (0)	43 (2)
121A	Hope	43 (1)	45 (1)	44 (2)	42 (1)	46 (3)	45 (3)	43 (1)	46 (2)	45 (2)	42 (0)	45 (1)	44 (1)	40 (0)	44 (2)	42 (1)
122	Warr	44 (1)	46 (1)	46 (2)	44 (2)	47 (2)	46 (3)	45 (3)	47 (2)	47 (3)	43 (0)	47 (2)	46 (2)	40 (-1)	45 (1)	44 (1)
123	Jackson and Edwards	44 (1)	46 (1)	46 (2)	44 (2)	47 (3)	46 (4)	45 (2)	48 (3)	47 (3)	44 (1)	47 (2)	46 (2)	41 (-1)	45 (1)	44 (1)
124	Kearns and McKell	45 (1)	47 (1)	46 (2)	44 (2)	47 (3)	46 (3)	45 (2)	48 (2)	47 (3)	44 (1)	47 (1)	46 (2)	41 (-1)	45 (1)	44 (1)
125	Little	44 (0)	47 (1)	46 (2)	44 (2)	47 (3)	46 (3)	45 (2)	48 (2)	47 (3)	44 (0)	47 (1)	47 (3)	42 (0)	45 (0)	44 (1)

Table B.2 C-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Ceq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
126A	Coranton Pty Limited	43 (0)	45 (1)	44 (1)	43 (2)	46 (3)	45 (3)	45 (3)	47 (3)	46 (3)	44 (1)	47 (2)	46 (3)	41 (0)	43 (-1)	42 (0)
126B	Coranton Pty Limited	44 (0)	46 (1)	45 (2)	43 (1)	47 (3)	45 (2)	45 (3)	47 (3)	46 (3)	44 (1)	47 (2)	46 (2)	41 (0)	44 (0)	43 (1)
130	Wood	44 (1)	46 (1)	45 (2)	44 (2)	47 (3)	45 (2)	46 (2)	47 (1)	46 (2)	45 (1)	48 (2)	47 (3)	41 (-1)	44 (-1)	43 (0)
131	Gittoes	45 (1)	46 (1)	45 (1)	44 (1)	47 (3)	45 (2)	46 (2)	48 (2)	46 (2)	45 (1)	48 (2)	47 (3)	41 (-1)	44 (-1)	43 (0)
132	McLaughlin	45 (0)	47 (1)	46 (1)	44 (1)	47 (2)	46 (3)	46 (2)	48 (2)	47 (3)	45 (0)	48 (2)	47 (3)	42 (0)	45 (0)	44 (0)
137	George	44 (0)	46 (1)	45 (2)	44 (2)	47 (3)	45 (2)	46 (2)	47 (1)	46 (2)	45 (1)	48 (2)	47 (3)	42 (0)	44 (-1)	43 (0)
138	Re	45 (1)	46 (0)	45 (1)	44 (1)	46 (2)	45 (2)	46 (2)	48 (2)	46 (2)	45 (0)	48 (2)	47 (3)	42 (0)	45 (0)	44 (1)
139	Logan	45 (0)	47 (1)	46 (2)	44 (1)	47 (2)	46 (3)	46 (2)	48 (2)	47 (3)	45 (1)	48 (2)	47 (3)	42 (0)	45 (0)	44 (0)
140	Logan	46 (1)	47 (0)	47 (1)	45 (1)	48 (2)	47 (3)	47 (3)	48 (2)	47 (2)	45 (0)	48 (1)	47 (2)	42 (-1)	46 (0)	45 (1)
142A	Ewen	46 (1)	48 (1)	46 (1)	44 (1)	46 (1)	45 (2)	45 (2)	47 (1)	46 (2)	44 (0)	48 (3)	47 (3)	42 (0)	44 (-1)	43 (-1)
142B	Ewen	46 (1)	47 (0)	46 (0)	45 (1)	47 (2)	46 (2)	47 (3)	48 (2)	47 (3)	45 (0)	48 (1)	47 (2)	41 (-2)	45 (-1)	44 (0)
142C	Ewen	46 (1)	47 (0)	46 (0)	45 (1)	47 (2)	46 (2)	47 (3)	48 (2)	47 (3)	45 (0)	48 (1)	47 (2)	41 (-2)	45 (-1)	44 (0)
143A	Lawson	46 (1)	48 (1)	47 (1)	44 (1)	45 (0)	45 (1)	45 (2)	47 (1)	45 (1)	44 (1)	48 (3)	46 (2)	41 (-1)	44 (-1)	43 (0)
143B	Lawson	46 (1)	48 (1)	47 (1)	45 (1)	48 (2)	46 (2)	47 (3)	49 (2)	48 (3)	45 (0)	49 (1)	48 (3)	42 (-1)	46 (0)	45 (0)
144	Bevan	45 (0)	47 (0)	46 (1)	44 (1)	46 (1)	45 (1)	45 (2)	47 (2)	45 (1)	44 (1)	48 (3)	46 (3)	41 (-1)	44 (0)	43 (0)
145	Elsmore	46 (1)	48 (1)	47 (2)	44 (1)	45 (0)	44 (1)	45 (1)	46 (1)	45 (1)	43 (0)	46 (1)	45 (2)	41 (0)	44 (0)	43 (0)
149	McInerney	51 (0)	53 (1)	52 (1)	47 (0)	50 (1)	49 (1)	48 (2)	51 (2)	50 (3)	46 (0)	49 (0)	48 (1)	45 (0)	47 (0)	46 (0)
153	Rath	41 (1)	44 (0)	43 (1)	39 (1)	44 (1)	43 (3)	40 (2)	46 (2)	44 (3)	39 (0)	44 (0)	42 (0)	37 (0)	43 (0)	42 (2)

Table B.2 C-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Ceq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
154	Rath	42 (1)	44 (1)	43 (0)	42 (2)	45 (2)	44 (2)	42 (3)	46 (2)	45 (2)	40 (0)	45 (0)	44 (1)	37 (0)	43 (1)	42 (2)
156B	Todhunter and Brook	43 (1)	45 (1)	44 (1)	42 (2)	45 (2)	44 (2)	43 (3)	47 (2)	46 (3)	41 (0)	46 (1)	44 (1)	38 (1)	43 (1)	43 (2)
156w	Todhunter and Brook	43 (1)	45 (1)	44 (1)	43 (2)	46 (2)	44 (2)	43 (2)	47 (2)	46 (3)	41 (0)	46 (1)	44 (1)	39 (1)	44 (2)	43 (2)
160	Dwyer	45 (1)	46 (1)	45 (1)	45 (2)	46 (1)	46 (2)	45 (2)	47 (1)	46 (1)	44 (1)	47 (2)	46 (2)	40 (0)	43 (0)	42 (0)
162	Lamaro	45 (0)	47 (1)	46 (1)	44 (1)	46 (1)	45 (1)	44 (1)	47 (2)	45 (1)	43 (0)	47 (2)	45 (1)	41 (0)	44 (-1)	43 (-1)
164	Sharrock	45 (0)	47 (0)	46 (0)	45 (2)	47 (2)	45 (1)	46 (2)	48 (2)	46 (1)	46 (1)	49 (3)	48 (3)	42 (-1)	45 (-1)	44 (-1)
165	Garton	46 (0)	48 (1)	47 (1)	46 (2)	49 (3)	48 (3)	47 (3)	50 (3)	48 (3)	46 (0)	49 (1)	48 (2)	43 (-1)	47 (0)	46 (0)
169A	McCraw	45 (0)	47 (1)	46 (1)	44 (1)	46 (1)	45 (1)	45 (2)	47 (2)	46 (2)	44 (0)	48 (2)	46 (2)	42 (-1)	44 (-1)	44 (0)
169e	McCraw	45 (0)	48 (1)	46 (1)	44 (1)	46 (1)	45 (1)	45 (2)	47 (2)	46 (2)	43 (0)	47 (2)	46 (2)	41 (-1)	44 (-1)	43 (-1)
170	Owens	45 (0)	47 (1)	46 (1)	44 (1)	46 (1)	45 (2)	45 (2)	47 (2)	46 (2)	44 (0)	47 (2)	46 (2)	42 (-1)	44 (-1)	44 (0)
171	Owens	45 (0)	48 (2)	46 (1)	44 (1)	46 (1)	45 (1)	45 (2)	47 (2)	46 (2)	45 (1)	47 (2)	46 (2)	42 (-1)	44 (-1)	44 (0)
174	Kastelic	45 (0)	47 (1)	46 (1)	44 (1)	46 (1)	45 (2)	45 (2)	47 (2)	46 (2)	46 (2)	48 (2)	48 (4)	42 (-1)	44 (-1)	44 (0)
175	Grapemen Holdings Pty Limited	46 (1)	47 (1)	46 (1)	44 (1)	46 (1)	45 (2)	45 (2)	47 (2)	46 (2)	45 (1)	48 (2)	47 (2)	42 (-1)	45 (0)	44 (0)
176	Grapemen Holdings Pty Limited	45 (0)	47 (1)	46 (1)	44 (1)	46 (1)	45 (2)	45 (2)	47 (2)	46 (2)	45 (1)	48 (2)	48 (4)	42 (-1)	45 (0)	44 (0)
177B	Tulloch	45 (1)	47 (1)	46 (1)	44 (1)	46 (1)	46 (3)	45 (2)	48 (3)	47 (3)	45 (0)	48 (2)	47 (2)	42 (-1)	44 (-1)	44 (0)
177A	Tulloch	45 (1)	47 (1)	46 (1)	44 (1)	46 (1)	46 (3)	45 (2)	47 (2)	47 (3)	45 (0)	47 (1)	47 (2)	42 (-1)	44 (-1)	44 (0)
179	Brooks and Thompson	46 (1)	48 (1)	47 (1)	45 (2)	46 (1)	46 (2)	45 (1)	48 (3)	47 (2)	45 (1)	47 (1)	47 (2)	42 (-1)	45 (-1)	45 (0)

Table B.2 C-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Ceq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
183	Foster	46 (1)	47 (1)	46 (1)	44 (1)	46 (2)	46 (3)	45 (2)	47 (2)	46 (2)	45 (1)	48 (2)	47 (2)	42 (-1)	45 (-1)	44 (-1)
184	Esslemont Family Holdings PTY Limited	46 (1)	47 (1)	46 (1)	45 (2)	46 (1)	46 (2)	45 (2)	47 (2)	47 (3)	45 (1)	48 (2)	47 (2)	42 (-1)	45 (-1)	44 (-1)
185	Poulos	46 (1)	47 (1)	46 (1)	44 (1)	46 (2)	46 (3)	45 (2)	47 (2)	46 (2)	45 (0)	47 (1)	47 (2)	42 (-1)	45 (0)	44 (-1)
188C	Tulloch	45 (0)	47 (1)	46 (1)	44 (1)	46 (2)	45 (2)	45 (2)	47 (2)	46 (2)	45 (0)	47 (1)	47 (2)	42 (-1)	45 (0)	44 (-1)
188A	Tulloch	45 (1)	47 (2)	46 (2)	44 (1)	46 (1)	45 (2)	45 (2)	47 (2)	46 (2)	45 (0)	47 (1)	47 (2)	42 (-1)	45 (0)	44 (0)
188B	Tulloch	45 (0)	47 (1)	46 (1)	44 (1)	46 (2)	45 (2)	45 (2)	47 (2)	46 (2)	45 (0)	47 (1)	47 (2)	42 (-1)	45 (0)	44 (-1)
190	Gallagher	44 (0)	46 (0)	46 (1)	44 (0)	47 (1)	47 (2)	45 (2)	48 (1)	48 (3)	45 (1)	47 (1)	47 (1)	41 (-1)	45 (0)	44 (0)
191	Robards and Myers	45 (1)	47 (1)	46 (1)	45 (0)	47 (1)	47 (2)	45 (2)	48 (1)	48 (3)	45 (1)	47 (0)	47 (1)	41 (-1)	45 (0)	44 (0)
192	Carr	44 (0)	47 (1)	46 (1)	44 (0)	47 (1)	47 (2)	45 (2)	48 (1)	48 (3)	44 (0)	47 (1)	47 (1)	41 (-1)	44 (-1)	44 (0)
193	Britten and Herlihy	45 (1)	47 (1)	46 (1)	45 (0)	47 (1)	47 (2)	46 (3)	48 (2)	47 (2)	45 (1)	47 (1)	47 (1)	41 (-1)	45 (0)	44 (0)
194	Smith	29 (1)	29 (1)	29 (1)	28 (0)	29 (1)	28 (0)	28 (2)	29 (1)	28 (1)	26 (1)	28 (2)	27 (1)	23 (-1)	24 (-1)	24 (0)
195	Kennedy	46 (1)	47 (1)	46 (0)	45 (1)	47 (1)	46 (1)	45 (1)	47 (0)	47 (1)	45 (2)	48 (3)	47 (2)	40 (1)	43 (-1)	42 (-1)
197	Kennedy	45 (1)	47 (1)	46 (1)	45 (1)	46 (1)	46 (1)	45 (1)	47 (2)	46 (1)	45 (1)	48 (2)	47 (1)	41 (0)	45 (-1)	44 (-1)
198	Orton	45 (0)	48 (1)	47 (1)	45 (0)	47 (0)	47 (1)	45 (1)	49 (2)	48 (2)	45 (1)	48 (1)	47 (0)	41 (-2)	45 (-1)	45 (0)
199	Gould	46 (1)	48 (1)	47 (1)	45 (0)	48 (2)	47 (1)	46 (2)	49 (2)	48 (2)	45 (0)	48 (1)	48 (2)	42 (-1)	46 (1)	46 (1)
200	Bencham	45 (0)	47 (0)	47 (1)	44 (-1)	47 (0)	46 (0)	45 (1)	48 (1)	48 (2)	45 (1)	47 (0)	47 (1)	41 (-2)	45 (0)	44 (-1)
202	Lakayev	44 (1)	46 (1)	45 (1)	43 (-1)	47 (1)	46 (1)	44 (1)	48 (2)	47 (2)	44 (1)	46 (0)	45 (0)	40 (0)	43 (-1)	43 (0)

Table B.2 C-WEIGHTED OPERATIONAL NOISE LEVELS L_{Ceq} 15 minute dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
203	Schipper	44 (0)	47 (1)	46 (1)	44 (0)	47 (1)	47 (2)	45 (2)	48 (1)	48 (3)	44 (0)	47 (1)	46 (0)	41 (-1)	44 (0)	44 (0)
204	Leonard	41 (1)	42 (1)	41 (0)	40 (1)	41 (1)	41 (1)	40 (2)	42 (1)	41 (1)	39 (2)	42 (3)	41 (2)	33 (-2)	36 (-2)	35 (-3)
206	Helliker	41 (1)	41 (0)	41 (1)	40 (1)	41 (1)	41 (1)	40 (1)	41 (0)	41 (0)	39 (2)	43 (3)	42 (3)	33 (-2)	37 (-2)	36 (-2)
207	Carr Thompson and Shearim	41 (1)	41 (0)	40 (0)	40 (1)	41 (1)	41 (1)	40 (1)	41 (0)	41 (0)	40 (3)	43 (3)	42 (3)	33 (-2)	37 (-3)	36 (-3)
208	Leslie	40 (0)	41 (1)	40 (0)	40 (1)	41 (1)	41 (1)	40 (1)	41 (0)	41 (0)	40 (3)	43 (3)	42 (3)	33 (-2)	37 (-3)	36 (-3)
209	Leslie	40 (0)	41 (1)	40 (0)	40 (1)	41 (1)	41 (1)	40 (1)	41 (0)	41 (0)	40 (3)	43 (3)	42 (3)	33 (-2)	37 (-3)	36 (-3)
211	Brennan	44 (0)	47 (1)	47 (1)	44 (-1)	47 (1)	46 (0)	45 (1)	48 (1)	48 (1)	45 (1)	47 (0)	47 (1)	42 (0)	44 (-1)	44 (0)
212	Icelink PTY Limited	45 (1)	47 (1)	47 (1)	44 (-1)	47 (1)	46 (0)	45 (1)	48 (0)	48 (1)	45 (1)	47 (1)	47 (1)	42 (0)	44 (-1)	44 (0)
213	Icelink PTY Limited	44 (0)	47 (1)	46 (1)	44 (0)	47 (1)	46 (1)	45 (1)	48 (1)	47 (1)	45 (1)	46 (0)	46 (0)	42 (0)	44 (0)	43 (-1)
214	Sydney Gas Operations PTY Ltd	43 (0)	46 (1)	45 (0)	43 (-1)	46 (1)	46 (1)	45 (1)	47 (1)	47 (1)	44 (1)	46 (1)	46 (1)	41 (0)	43 (0)	43 (0)
217s	Russell	47 (1)	48 (1)	48 (1)	45 (0)	47 (1)	47 (2)	46 (2)	47 (0)	47 (1)	45 (1)	49 (3)	49 (3)	40 (-1)	45 (-1)	45 (-1)
217m	Russell	47 (1)	47 (0)	47 (1)	44 (0)	47 (1)	47 (2)	45 (1)	47 (1)	47 (1)	46 (3)	48 (2)	48 (3)	40 (-1)	45 (-1)	45 (-1)
217n	Russell	47 (2)	48 (1)	48 (2)	44 (-1)	46 (0)	46 (1)	45 (2)	46 (-1)	46 (0)	43 (1)	48 (3)	47 (2)	37 (-3)	43 (-2)	43 (-2)
220	Purser and Keayes	46 (1)	48 (1)	48 (1)	45 (0)	48 (1)	48 (1)	46 (2)	48 (0)	48 (1)	45 (0)	47 (1)	47 (1)	42 (0)	45 (1)	44 (0)
221	Brasington	46 (1)	48 (1)	47 (0)	45 (0)	48 (1)	48 (2)	45 (1)	48 (0)	48 (1)	45 (1)	47 (1)	47 (1)	42 (-1)	45 (1)	45 (1)
222	Vassallo	46 (0)	48 (0)	48 (1)	45 (-1)	48 (1)	48 (1)	46 (2)	48 (0)	48 (0)	45 (0)	48 (1)	47 (0)	41 (-1)	45 (1)	44 (0)
223	Jackson	46 (0)	48 (0)	48 (1)	46 (0)	48 (1)	48 (1)	46 (2)	48 (0)	48 (1)	45 (0)	48 (1)	48 (2)	42 (0)	45 (1)	45 (1)

Table B.2 C-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Ceq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
225	Harris	45 (1)	46 (1)	46 (1)	45 (1)	47 (1)	47 (1)	46 (2)	47 (1)	47 (1)	45 (1)	47 (1)	47 (2)	43 (1)	44 (0)	44 (0)
226	Vassallo	47 (1)	49 (1)	48 (1)	46 (0)	48 (0)	48 (1)	46 (2)	49 (1)	48 (0)	45 (-1)	48 (1)	48 (1)	41 (-1)	44 (0)	44 (0)
227	Beavis	46 (0)	48 (0)	48 (1)	46 (0)	48 (0)	48 (1)	46 (2)	48 (0)	48 (0)	45 (-1)	48 (1)	48 (1)	42 (0)	45 (1)	45 (1)
228	Lamb	47 (1)	49 (1)	48 (1)	46 (0)	48 (0)	48 (1)	47 (3)	49 (1)	48 (0)	45 (-1)	48 (1)	48 (1)	42 (0)	45 (1)	45 (1)
229	Ritchie	47 (1)	48 (0)	48 (1)	46 (0)	48 (0)	48 (1)	47 (3)	49 (1)	49 (1)	46 (0)	48 (1)	48 (1)	42 (-1)	45 (0)	45 (0)
230	Cant	47 (1)	49 (1)	49 (1)	46 (0)	49 (1)	49 (1)	47 (3)	49 (1)	49 (1)	46 (0)	48 (1)	48 (1)	42 (-1)	45 (0)	45 (0)
231	Dawson	47 (1)	49 (1)	49 (1)	46 (0)	49 (1)	48 (1)	47 (2)	49 (1)	49 (1)	46 (0)	48 (1)	48 (1)	43 (0)	45 (0)	45 (0)
232	Medhurst	47 (1)	49 (1)	49 (1)	46 (0)	49 (1)	49 (1)	47 (2)	49 (0)	49 (1)	46 (0)	49 (2)	48 (1)	43 (0)	46 (1)	46 (1)
233	Vikas	47 (1)	49 (1)	49 (1)	46 (0)	49 (1)	49 (1)	47 (3)	49 (1)	49 (1)	46 (0)	48 (1)	48 (1)	42 (-1)	46 (1)	46 (1)
234	Thompson	47 (1)	49 (1)	49 (1)	46 (0)	49 (1)	49 (1)	47 (2)	49 (0)	49 (1)	46 (0)	49 (2)	49 (2)	43 (0)	46 (1)	46 (1)
235	Caban	47 (1)	49 (1)	49 (1)	46 (0)	49 (1)	48 (0)	47 (2)	48 (0)	48 (0)	46 (1)	48 (1)	48 (1)	44 (1)	46 (1)	46 (1)
236	Krey	46 (0)	49 (1)	49 (1)	46 (0)	48 (0)	48 (0)	47 (2)	48 (0)	48 (0)	46 (1)	48 (1)	48 (1)	44 (1)	46 (1)	46 (1)
237	Ryan and Harrison	47 (1)	49 (1)	49 (1)	46 (0)	49 (1)	49 (1)	47 (2)	49 (1)	49 (1)	46 (1)	48 (1)	48 (1)	43 (0)	46 (1)	46 (1)
238	Topham	46 (0)	49 (1)	49 (1)	46 (0)	48 (0)	48 (0)	47 (2)	48 (0)	48 (0)	45 (0)	48 (1)	48 (1)	43 (0)	46 (1)	46 (1)
239	Waters	46 (1)	48 (0)	48 (0)	44 (-2)	47 (0)	46 (-1)	45 (1)	46 (-2)	46 (-1)	44 (1)	46 (2)	46 (2)	40 (-1)	42 (-1)	42 (-1)
240	Godyn	46 (0)	49 (1)	49 (1)	46 (0)	49 (1)	49 (1)	47 (2)	48 (0)	48 (0)	46 (1)	48 (1)	48 (1)	43 (0)	46 (1)	46 (1)
241	Kaizer	46 (0)	49 (1)	48 (0)	46 (0)	49 (1)	49 (1)	47 (2)	48 (0)	48 (0)	46 (1)	48 (2)	48 (2)	43 (0)	45 (0)	45 (0)
242	Bridge	46 (0)	49 (1)	48 (0)	46 (0)	48 (0)	48 (0)	47 (2)	48 (0)	48 (0)	46 (1)	48 (2)	48 (2)	43 (0)	45 (0)	45 (0)

Table B.2 C-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Ceq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
243	Neville	46 (0)	48 (0)	48 (0)	46 (0)	49 (1)	49 (1)	46 (1)	48 (1)	48 (1)	45 (0)	48 (2)	48 (2)	43 (0)	45 (1)	45 (1)
244	Caban	45 (0)	48 (0)	48 (0)	45 (0)	48 (1)	48 (1)	46 (2)	47 (0)	47 (0)	45 (0)	47 (1)	47 (1)	43 (1)	44 (0)	44 (0)
247	Upward	45 (0)	47 (0)	47 (0)	45 (0)	48 (1)	48 (1)	46 (2)	47 (0)	47 (0)	45 (0)	47 (2)	47 (2)	43 (1)	44 (1)	44 (0)
250	Icelink PTY Limited	45 (0)	48 (1)	47 (1)	45 (0)	48 (1)	47 (1)	45 (2)	48 (0)	48 (1)	45 (1)	47 (1)	47 (1)	42 (-1)	45 (0)	44 (0)
254	Mitchell	45 (0)	48 (0)	48 (0)	45 (-1)	48 (1)	48 (1)	46 (2)	48 (1)	48 (1)	45 (0)	47 (2)	47 (1)	42 (0)	44 (0)	44 (0)
256	Cameron	45 (0)	47 (-1)	47 (-1)	45 (0)	48 (1)	48 (1)	46 (2)	47 (0)	47 (0)	45 (0)	47 (2)	47 (1)	42 (0)	44 (1)	44 (0)
261	Smith	46 (1)	49 (1)	49 (1)	46 (0)	49 (1)	49 (1)	47 (2)	48 (1)	48 (0)	46 (0)	47 (1)	47 (1)	43 (1)	45 (1)	45 (1)
262	Smith	45 (0)	48 (0)	48 (0)	46 (0)	49 (1)	49 (1)	47 (2)	48 (1)	48 (0)	46 (0)	47 (1)	47 (1)	43 (1)	45 (1)	45 (1)
263	Reid	45 (0)	48 (0)	48 (0)	46 (0)	49 (1)	49 (1)	47 (2)	48 (1)	48 (1)	46 (0)	47 (1)	47 (1)	43 (1)	45 (1)	45 (1)
264	Reid	45 (0)	48 (0)	48 (0)	46 (0)	49 (1)	49 (1)	47 (2)	48 (1)	48 (1)	46 (0)	47 (1)	47 (1)	43 (1)	45 (1)	45 (1)
265	Turnbull	45 (0)	48 (0)	48 (0)	46 (0)	49 (1)	49 (1)	47 (2)	48 (1)	48 (1)	45 (0)	47 (1)	47 (1)	43 (1)	45 (1)	45 (1)
266	Hedley and Louis	45 (0)	48 (0)	48 (0)	46 (0)	49 (1)	49 (1)	47 (2)	48 (1)	48 (1)	45 (0)	47 (1)	47 (1)	42 (0)	45 (1)	45 (1)
267	Powis	45 (0)	48 (0)	48 (0)	46 (0)	49 (1)	49 (1)	47 (2)	48 (1)	48 (1)	45 (0)	47 (1)	47 (1)	42 (0)	45 (1)	45 (1)
272	Bulga Community Centre Incorporated	45 (0)	48 (0)	48 (0)	46 (0)	49 (2)	49 (1)	47 (2)	48 (1)	48 (1)	45 (0)	47 (1)	47 (1)	42 (0)	45 (1)	45 (1)
273	Silk	45 (0)	48 (1)	48 (1)	46 (-1)	49 (2)	49 (1)	47 (2)	48 (1)	48 (1)	45 (0)	47 (1)	47 (1)	42 (0)	45 (1)	45 (1)
274	Messrs Dragicvic	46 (1)	48 (0)	48 (0)	46 (-1)	49 (2)	49 (1)	47 (2)	48 (1)	48 (1)	45 (0)	47 (1)	47 (1)	42 (0)	45 (1)	45 (1)
275	Dragicevic	45 (0)	48 (0)	48 (0)	46 (-1)	49 (2)	49 (1)	47 (2)	48 (1)	48 (1)	45 (0)	47 (1)	47 (1)	42 (0)	45 (1)	45 (1)

Table B.2 C-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Ceq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
276	Cooke	45 (0)	48 (0)	48 (0)	46 (-1)	49 (2)	49 (2)	47 (2)	48 (1)	48 (1)	45 (0)	47 (1)	47 (1)	42 (0)	44 (0)	44 (0)
277	Grainger	45 (0)	48 (0)	48 (0)	46 (-1)	49 (2)	49 (2)	47 (2)	48 (1)	48 (1)	45 (0)	47 (1)	47 (1)	42 (0)	44 (0)	44 (0)
279	Bendall	45 (0)	48 (0)	48 (0)	46 (-1)	49 (2)	49 (1)	47 (2)	48 (1)	48 (1)	45 (0)	47 (1)	47 (1)	42 (0)	45 (1)	45 (1)
280	Magin	45 (0)	48 (0)	48 (0)	46 (0)	49 (2)	49 (1)	47 (2)	48 (1)	48 (1)	45 (0)	47 (1)	47 (1)	42 (0)	44 (0)	44 (0)
281	Harris and Ferguson	45 (0)	48 (0)	48 (0)	46 (0)	48 (1)	48 (1)	47 (2)	48 (1)	48 (1)	45 (0)	47 (2)	47 (1)	42 (0)	44 (0)	44 (0)
283	Saunders	45 (0)	48 (0)	48 (0)	46 (0)	48 (1)	48 (1)	47 (2)	48 (1)	48 (1)	45 (0)	47 (2)	47 (1)	42 (0)	44 (0)	44 (0)
284	Nichols and Anderson	45 (0)	48 (1)	48 (1)	46 (0)	48 (1)	48 (1)	46 (1)	48 (1)	48 (1)	45 (0)	47 (2)	47 (1)	42 (0)	44 (0)	44 (0)
285	Harris	45 (0)	48 (1)	48 (1)	46 (0)	48 (1)	48 (1)	46 (1)	48 (1)	48 (1)	45 (0)	47 (2)	47 (1)	42 (0)	44 (1)	44 (0)
286	McLachlan	45 (0)	48 (1)	48 (1)	46 (0)	48 (1)	48 (1)	46 (2)	48 (1)	48 (1)	45 (0)	47 (2)	47 (1)	42 (0)	44 (1)	44 (0)
287	McLaughlin	45 (1)	48 (1)	48 (1)	46 (0)	48 (1)	48 (1)	46 (2)	47 (0)	47 (0)	45 (0)	47 (2)	47 (2)	42 (0)	44 (1)	44 (0)
288	Ford	45 (0)	48 (1)	48 (0)	46 (-1)	48 (1)	48 (1)	47 (2)	48 (1)	48 (1)	45 (0)	47 (2)	47 (1)	42 (0)	44 (0)	44 (0)
289	Pringle	45 (0)	48 (1)	48 (1)	46 (0)	48 (1)	48 (1)	46 (1)	47 (0)	47 (0)	45 (0)	47 (2)	47 (2)	42 (0)	44 (1)	44 (0)
290	Janse van Rensburg	45 (0)	48 (1)	48 (1)	46 (0)	48 (1)	48 (1)	46 (2)	47 (0)	47 (0)	45 (0)	47 (2)	47 (2)	42 (0)	44 (0)	44 (0)
291	Adamthwaite	45 (0)	48 (1)	48 (1)	46 (0)	48 (1)	48 (1)	46 (1)	47 (0)	47 (0)	45 (0)	47 (2)	47 (2)	42 (0)	44 (0)	44 (0)
292	Evans	45 (0)	48 (1)	48 (1)	46 (0)	48 (1)	48 (1)	46 (1)	48 (1)	48 (1)	45 (0)	47 (2)	47 (1)	42 (0)	44 (0)	44 (0)
293	Gallagher	45 (0)	48 (1)	48 (1)	46 (0)	48 (1)	48 (1)	46 (1)	47 (0)	47 (0)	45 (0)	47 (2)	47 (2)	42 (0)	44 (0)	44 (0)
294	Brown	45 (0)	48 (0)	48 (0)	46 (0)	48 (1)	48 (1)	46 (1)	47 (0)	47 (0)	45 (0)	47 (2)	47 (2)	42 (0)	44 (1)	44 (0)

Table B.2 C-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Ceq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
295	Carnevale Testa Angelatos	45 (0)	47 (0)	47 (0)	46 (0)	48 (1)	48 (1)	46 (2)	47 (0)	47 (0)	45 (0)	46 (1)	46 (1)	42 (0)	44 (1)	44 (1)
296	Burgess	45 (0)	48 (0)	48 (0)	46 (0)	48 (1)	48 (1)	46 (1)	47 (0)	47 (0)	45 (0)	47 (2)	47 (2)	42 (0)	44 (1)	44 (0)
297	Fogwell	45 (0)	48 (1)	48 (1)	46 (0)	48 (1)	48 (1)	46 (1)	47 (0)	47 (0)	45 (0)	47 (2)	47 (2)	42 (0)	44 (1)	44 (0)
298	Player	42 (0)	45 (0)	45 (0)	42 (0)	44 (0)	44 (0)	43 (2)	44 (0)	44 (0)	40 (1)	41 (2)	41 (1)	38 (0)	39 (0)	39 (0)
300	Price	40 (0)	41 (1)	41 (0)	38 (-1)	41 (2)	41 (2)	39 (2)	41 (2)	41 (2)	38 (1)	41 (3)	41 (3)	34 (-1)	37 (0)	37 (0)
301	Powell and Shannon	40 (1)	40 (1)	40 (0)	38 (0)	39 (1)	39 (1)	39 (3)	40 (2)	40 (2)	38 (1)	40 (3)	40 (3)	34 (-1)	37 (1)	36 (0)
302	Harrison	41 (1)	42 (1)	42 (1)	41 (1)	44 (2)	44 (2)	41 (2)	42 (1)	42 (1)	39 (1)	41 (2)	41 (2)	35 (-1)	38 (0)	38 (-1)
303	McKenzie	44 (1)	46 (2)	46 (2)	43 (1)	45 (1)	45 (1)	44 (3)	45 (1)	45 (1)	43 (1)	45 (2)	45 (2)	39 (0)	41 (0)	41 (0)
304	Banks	44 (0)	47 (0)	47 (0)	45 (0)	47 (1)	47 (1)	45 (1)	47 (1)	47 (1)	44 (0)	46 (2)	46 (1)	42 (1)	43 (0)	43 (0)
305	Anderson	44 (0)	46 (0)	46 (0)	45 (0)	47 (1)	47 (1)	45 (1)	46 (0)	46 (0)	44 (0)	46 (2)	46 (2)	42 (1)	43 (1)	43 (0)
306	Gregory	45 (0)	48 (1)	48 (0)	46 (-1)	48 (1)	48 (1)	46 (1)	48 (1)	48 (1)	45 (0)	47 (2)	47 (1)	42 (0)	44 (0)	44 (0)
307	Mobberley	46 (0)	48 (0)	48 (0)	46 (-1)	49 (1)	49 (1)	46 (2)	49 (1)	49 (1)	44 (-1)	47 (0)	47 (0)	40 (-2)	45 (0)	45 (0)
308	Renaud	45 (0)	48 (1)	48 (0)	46 (-1)	49 (1)	49 (1)	46 (1)	48 (1)	48 (1)	44 (-1)	47 (1)	47 (1)	40 (-2)	45 (0)	45 (0)
309	Louis	44 (0)	47 (0)	47 (0)	45 (-1)	47 (1)	47 (1)	45 (1)	47 (1)	47 (0)	44 (0)	46 (1)	46 (1)	41 (0)	43 (0)	43 (0)
311	Mulally McMaugh Burke	44 (-1)	47 (-1)	47 (-1)	46 (0)	48 (1)	48 (0)	45 (1)	48 (1)	48 (1)	44 (-1)	46 (0)	46 (0)	40 (-2)	45 (0)	45 (0)
314	Hanson	44 (0)	47 (0)	47 (0)	45 (-1)	47 (1)	47 (1)	45 (1)	47 (1)	47 (1)	44 (0)	46 (1)	46 (1)	41 (0)	43 (0)	43 (0)
316B	Caban	44 (0)	47 (0)	47 (0)	45 (-1)	47 (1)	47 (1)	45 (1)	47 (1)	47 (1)	44 (0)	46 (1)	46 (1)	41 (0)	43 (0)	43 (0)

Table B.2 C-WEIGHTED OPERATIONAL NOISE LEVELS $L_{Ceq, 15 \text{ minute}}$ dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
316A	Caban	44 (0)	47 (0)	47 (0)	45 (-1)	47 (1)	47 (1)	45 (1)	46 (0)	46 (0)	44 (0)	45 (0)	45 (0)	41 (0)	43 (0)	43 (0)
317	Lancaster	44 (0)	47 (1)	47 (1)	45 (-1)	47 (1)	47 (1)	45 (1)	47 (0)	47 (0)	44 (0)	45 (0)	45 (0)	40 (-1)	43 (-1)	43 (-1)
319B	Estvale Holdings Pty Ltd	43 (0)	47 (2)	45 (1)	44 (2)	46 (1)	46 (3)	43 (2)	46 (0)	45 (2)	41 (0)	45 (1)	44 (2)	38 (0)	44 (1)	43 (3)
319A	Estvale Holdings Pty Ltd	44 (1)	47 (1)	46 (2)	44 (1)	46 (0)	46 (2)	43 (2)	46 (0)	46 (2)	41 (0)	45 (1)	45 (3)	38 (0)	44 (1)	43 (3)
323	Poulsen	42 (0)	44 (1)	44 (0)	46 (3)	47 (3)	47 (3)	46 (0)	47 (0)	47 (0)	43 (-1)	45 (0)	45 (-1)	43 (-1)	44 (-1)	45 (-1)
324	Wood	40 (0)	41 (1)	42 (1)	44 (3)	46 (5)	46 (4)	43 (0)	45 (1)	45 (0)	41 (1)	43 (3)	44 (3)	39 (0)	41 (0)	42 (0)
325	Ancich	42 (0)	44 (1)	44 (0)	45 (2)	47 (3)	47 (3)	44 (-2)	46 (0)	47 (0)	42 (-2)	44 (-1)	45 (-1)	40 (-4)	43 (-2)	44 (-2)
326	McNaught	40 (1)	40 (1)	40 (1)	37 (-1)	40 (3)	40 (2)	38 (2)	40 (3)	40 (3)	37 (1)	39 (2)	39 (2)	33 (-1)	36 (0)	36 (0)

- Note:
1. Receptor 149 currently has rights to acquisition upon request;
 2. Bolded results denote predicted result exceeds PSNC (if applicable);
 3. Bracketed results indicate change relative to EIS.

Table B.3 C-WEIGHTED MINUS A-WEIGHTED RESULTS - dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
1A	Hedley	12 (33)	13 (35)	13 (35)	12 (36)	12 (38)	12 (38)	13 (33)	14 (35)	14 (35)	14 (29)	14 (32)	14 (32)	14 (27)	14 (30)	14 (30)
1B	Cant	13 (34)	13 (36)	13 (36)	15 (31)	13 (35)	14 (34)	14 (33)	14 (35)	14 (35)	15 (31)	14 (34)	14 (34)	15 (27)	15 (30)	15 (30)
8	Marland	11 (32)	11 (34)	10 (35)	10 (36)	9 (38)	10 (38)	13 (32)	12 (34)	12 (35)	15 (27)	13 (31)	13 (32)	15 (25)	13 (30)	13 (31)
20A	Bosco	16 (31)	16 (33)	16 (32)	17 (27)	16 (31)	16 (31)	15 (28)	15 (31)	15 (31)	15 (27)	15 (31)	15 (31)	14 (25)	15 (29)	15 (29)
20B	Bosco	16 (31)	16 (33)	16 (32)	17 (27)	16 (31)	16 (31)	15 (28)	15 (31)	15 (31)	15 (27)	15 (31)	15 (31)	14 (25)	15 (29)	15 (29)
21	Rogers	15 (30)	15 (33)	15 (33)	16 (27)	16 (31)	16 (31)	15 (27)	15 (31)	15 (31)	16 (25)	14 (31)	15 (30)	15 (23)	15 (29)	15 (29)
23	Hungerford	16 (24)	15 (30)	14 (30)	17 (21)	15 (29)	15 (28)	16 (20)	15 (28)	14 (28)	16 (19)	14 (27)	14 (26)	17 (13)	14 (26)	13 (26)
33	Stevens and Company Pty Limited	11 (28)	11 (29)	12 (27)	15 (20)	10 (29)	11 (27)	15 (21)	11 (29)	11 (28)	14 (19)	11 (25)	15 (20)	13 (17)	11 (23)	11 (22)
37	Earl	13 (23)	14 (22)	14 (21)	14 (19)	14 (22)	14 (20)	14 (19)	14 (22)	15 (20)	14 (19)	15 (21)	14 (20)	13 (17)	13 (20)	13 (19)
38	Parkes	9 (32)	12 (30)	14 (27)	14 (24)	13 (29)	13 (28)	14 (25)	12 (30)	14 (28)	16 (21)	13 (30)	13 (27)	14 (19)	12 (30)	13 (26)
41	Darcy Byron Pty Ltd	11 (32)	13 (34)	13 (34)	13 (31)	13 (34)	13 (34)	13 (30)	13 (33)	13 (33)	13 (28)	13 (31)	14 (30)	13 (25)	12 (31)	13 (30)
46	Gleave	11 (33)	13 (34)	13 (34)	13 (31)	13 (34)	13 (34)	13 (30)	13 (33)	14 (32)	13 (28)	13 (31)	14 (30)	13 (26)	14 (30)	13 (30)
55	Crow	12 (32)	13 (35)	13 (34)	12 (31)	13 (34)	13 (34)	13 (30)	12 (34)	13 (33)	15 (28)	13 (32)	13 (32)	13 (27)	13 (31)	13 (31)
56	Lambkin	12 (32)	12 (35)	13 (34)	13 (31)	13 (34)	13 (34)	13 (30)	13 (33)	13 (33)	14 (28)	13 (32)	13 (32)	14 (26)	13 (31)	13 (30)
57	Rogers	11 (33)	13 (34)	12 (34)	13 (31)	13 (34)	13 (34)	13 (30)	13 (33)	13 (33)	13 (29)	12 (32)	12 (32)	13 (26)	13 (31)	13 (30)
58	Stafa	11 (33)	13 (35)	13 (34)	13 (31)	13 (34)	13 (34)	13 (30)	13 (33)	13 (33)	14 (28)	13 (32)	13 (32)	13 (27)	13 (31)	13 (30)

Table B.3 C-WEIGHTED MINUS A-WEIGHTED RESULTS - dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
60	Poile	12 (32)	12 (35)	13 (34)	13 (30)	13 (34)	14 (33)	13 (30)	13 (33)	13 (33)	14 (28)	13 (32)	13 (31)	13 (27)	13 (31)	13 (30)
61	Larkin	11 (33)	12 (35)	13 (34)	13 (31)	13 (34)	13 (34)	14 (30)	13 (33)	13 (33)	13 (29)	13 (32)	13 (32)	13 (26)	12 (31)	13 (30)
62	Sanger	11 (33)	13 (35)	14 (34)	13 (31)	13 (34)	14 (33)	13 (30)	13 (33)	13 (33)	14 (28)	13 (32)	13 (32)	13 (26)	12 (31)	13 (30)
63	O'Toole	12 (32)	13 (35)	14 (34)	14 (30)	13 (34)	14 (33)	13 (30)	13 (33)	13 (33)	14 (28)	14 (31)	14 (31)	14 (26)	13 (30)	13 (30)
71	Garth	12 (32)	12 (35)	13 (34)	13 (31)	13 (34)	13 (34)	14 (30)	13 (34)	13 (33)	14 (29)	13 (33)	12 (33)	14 (26)	13 (31)	14 (30)
72	Matley	11 (33)	13 (35)	13 (34)	13 (30)	13 (34)	13 (34)	13 (30)	13 (33)	13 (33)	15 (28)	13 (32)	13 (32)	13 (27)	13 (31)	14 (30)
73	Hebbe and Bush	12 (32)	13 (35)	13 (34)	13 (30)	13 (34)	13 (34)	13 (30)	13 (33)	13 (33)	15 (28)	14 (32)	13 (32)	13 (27)	13 (31)	14 (30)
74	Towers and Maviglia	12 (32)	12 (35)	13 (34)	13 (30)	13 (34)	13 (34)	13 (30)	13 (33)	13 (33)	15 (28)	13 (32)	13 (32)	13 (27)	13 (31)	14 (30)
76	Chaffey	12 (32)	12 (35)	13 (34)	13 (30)	13 (34)	13 (34)	13 (30)	13 (33)	13 (33)	14 (28)	13 (32)	13 (32)	13 (27)	13 (31)	14 (30)
78	Smolenaers	12 (32)	12 (35)	13 (34)	13 (30)	13 (34)	13 (34)	13 (30)	13 (33)	13 (33)	15 (28)	13 (32)	13 (32)	13 (27)	13 (31)	14 (30)
80	Duggan	13 (32)	13 (34)	13 (34)	14 (30)	14 (33)	14 (33)	14 (29)	14 (32)	14 (32)	13 (28)	13 (31)	14 (30)	14 (26)	13 (30)	14 (29)
82	Mears	13 (31)	14 (33)	14 (33)	14 (30)	14 (33)	13 (33)	14 (29)	14 (32)	14 (32)	14 (28)	13 (31)	14 (30)	14 (26)	14 (29)	14 (29)
83	Nightingale Vineyards PTY Limited	13 (31)	13 (34)	14 (33)	14 (30)	14 (33)	13 (33)	14 (29)	13 (33)	13 (33)	13 (29)	14 (31)	13 (31)	14 (26)	13 (30)	14 (29)
84	Stacey	12 (32)	13 (34)	14 (33)	14 (30)	14 (33)	14 (33)	14 (30)	13 (34)	14 (33)	13 (29)	13 (32)	14 (31)	14 (27)	14 (30)	13 (30)
85	Towns	13 (32)	13 (34)	14 (33)	14 (30)	14 (33)	14 (33)	14 (30)	13 (34)	14 (33)	13 (29)	13 (32)	14 (31)	14 (27)	14 (30)	14 (30)
86	Richardson	13 (31)	13 (33)	14 (32)	14 (29)	14 (32)	14 (31)	14 (30)	13 (34)	13 (33)	14 (29)	13 (33)	13 (32)	14 (27)	13 (31)	14 (30)
87	Connolly	13 (31)	13 (33)	14 (32)	14 (29)	14 (32)	14 (31)	14 (30)	13 (34)	13 (33)	14 (28)	12 (34)	13 (32)	14 (27)	13 (31)	13 (30)

Table B.3 C-WEIGHTED MINUS A-WEIGHTED RESULTS - dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
88	Ferguson	13 (33)	13 (35)	13 (35)	14 (31)	13 (35)	13 (34)	14 (31)	13 (35)	13 (34)	14 (29)	12 (35)	14 (33)	14 (27)	13 (32)	13 (31)
90	Tsiolkas	14 (30)	13 (32)	14 (31)	14 (29)	13 (32)	14 (31)	14 (30)	14 (33)	14 (32)	13 (29)	13 (33)	13 (32)	14 (26)	14 (30)	14 (29)
91	Dunn and Wakeman	13 (30)	13 (32)	14 (31)	14 (28)	14 (30)	14 (29)	14 (29)	13 (32)	14 (31)	13 (29)	13 (32)	13 (31)	14 (26)	13 (29)	14 (28)
93	Danks	13 (33)	14 (35)	13 (35)	14 (31)	14 (34)	13 (34)	14 (32)	13 (35)	14 (34)	13 (30)	13 (34)	14 (33)	14 (27)	14 (31)	14 (30)
94	Rozene Pty Limited	12 (34)	12 (36)	13 (35)	13 (32)	13 (35)	14 (34)	13 (32)	13 (35)	14 (34)	13 (30)	12 (35)	12 (34)	13 (28)	13 (32)	13 (31)
95	Rozene Pty Limited	12 (34)	13 (36)	13 (35)	13 (32)	13 (35)	13 (34)	14 (32)	12 (36)	13 (35)	13 (30)	13 (35)	13 (34)	13 (28)	13 (32)	13 (31)
97	Lambkin	11 (35)	11 (38)	11 (36)	13 (31)	12 (34)	12 (33)	13 (31)	12 (34)	12 (33)	10 (33)	12 (32)	12 (31)	13 (29)	12 (32)	12 (31)
98	Fromberg	13 (32)	14 (34)	14 (33)	14 (30)	14 (33)	15 (32)	14 (31)	14 (34)	14 (33)	14 (29)	14 (33)	14 (32)	14 (26)	15 (30)	15 (29)
100	Calcott-McKenzie	12 (30)	13 (33)	13 (32)	13 (28)	13 (31)	13 (31)	14 (27)	13 (30)	13 (29)	14 (24)	14 (27)	14 (26)	13 (21)	13 (26)	13 (25)
101	Boustred Spence Turner and Cowan	12 (33)	13 (35)	13 (35)	13 (31)	12 (35)	14 (33)	13 (31)	13 (35)	14 (33)	13 (30)	13 (34)	13 (33)	14 (27)	13 (31)	14 (30)
102	Morsillo	12 (34)	14 (35)	13 (35)	14 (31)	13 (35)	13 (34)	14 (31)	13 (35)	13 (34)	13 (30)	13 (34)	13 (33)	14 (27)	14 (31)	14 (30)
103	Bell	12 (34)	13 (36)	13 (35)	13 (32)	13 (35)	13 (34)	14 (32)	13 (35)	13 (34)	13 (30)	13 (34)	13 (33)	13 (28)	13 (32)	13 (31)
105A	Bird and T Lambkin	14 (33)	12 (36)	13 (34)	13 (31)	12 (34)	13 (33)	13 (32)	12 (35)	13 (33)	12 (32)	12 (35)	13 (33)	13 (29)	13 (32)	13 (31)
105B	Bird and T Lambkin	13 (32)	13 (34)	13 (33)	13 (30)	13 (32)	14 (31)	13 (31)	13 (34)	13 (33)	12 (31)	13 (34)	13 (33)	14 (28)	13 (31)	13 (30)
105C	Bird and T Lambkin	14 (33)	12 (36)	13 (34)	13 (31)	12 (34)	13 (33)	13 (32)	12 (35)	13 (33)	12 (32)	12 (35)	13 (33)	13 (29)	13 (32)	13 (31)
108	Cowan	13 (31)	14 (32)	14 (31)	15 (28)	15 (31)	14 (31)	14 (30)	14 (33)	14 (32)	14 (29)	13 (33)	14 (32)	14 (26)	14 (30)	14 (29)
109	Romke	14 (30)	14 (32)	14 (32)	14 (29)	14 (32)	15 (31)	15 (30)	14 (33)	14 (32)	15 (28)	14 (32)	14 (32)	14 (26)	15 (29)	14 (29)

Table B.3 C-WEIGHTED MINUS A-WEIGHTED RESULTS - dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
113B	Cowan	14 (30)	14 (32)	14 (31)	15 (28)	14 (32)	14 (31)	14 (30)	15 (32)	15 (31)	14 (28)	14 (32)	14 (31)	15 (25)	15 (29)	15 (28)
113A	Cowan	14 (30)	14 (32)	14 (31)	15 (28)	14 (32)	14 (31)	14 (30)	14 (32)	15 (31)	14 (28)	13 (33)	14 (31)	14 (26)	14 (29)	14 (28)
114	Palmer	15 (30)	15 (32)	15 (32)	15 (29)	15 (32)	15 (31)	15 (30)	15 (32)	16 (31)	15 (28)	15 (32)	15 (31)	15 (25)	15 (29)	16 (28)
115	Goldfinch	14 (30)	14 (32)	14 (31)	15 (29)	14 (32)	15 (31)	14 (30)	14 (33)	14 (32)	15 (28)	14 (32)	15 (31)	15 (25)	15 (29)	15 (28)
116	Houtzaager	14 (30)	14 (32)	14 (31)	14 (29)	15 (31)	15 (30)	14 (30)	15 (32)	15 (31)	14 (28)	14 (32)	14 (31)	14 (26)	14 (29)	15 (28)
117	Tolson	13 (30)	14 (32)	14 (31)	14 (28)	14 (30)	13 (30)	14 (29)	14 (31)	14 (30)	13 (29)	14 (32)	13 (31)	14 (26)	13 (29)	13 (28)
118	McManus	13 (30)	13 (33)	13 (31)	14 (28)	13 (30)	14 (29)	13 (29)	13 (31)	14 (30)	13 (29)	14 (31)	13 (30)	14 (26)	14 (28)	14 (27)
119	Hann-Devries	12 (31)	12 (34)	13 (32)	14 (28)	13 (31)	14 (30)	14 (29)	13 (32)	13 (31)	14 (27)	14 (30)	14 (30)	15 (25)	14 (29)	14 (28)
121B	Hope	12 (31)	13 (32)	13 (31)	15 (28)	14 (32)	14 (31)	14 (31)	13 (34)	14 (32)	13 (29)	14 (32)	14 (31)	14 (26)	13 (30)	14 (29)
121A	Hope	12 (31)	13 (32)	13 (31)	14 (28)	13 (33)	14 (31)	13 (30)	13 (33)	14 (31)	14 (28)	13 (32)	14 (30)	14 (26)	14 (30)	13 (29)
122	Warr	14 (30)	14 (32)	15 (31)	15 (29)	15 (32)	15 (31)	15 (30)	14 (33)	15 (32)	14 (29)	15 (32)	15 (31)	15 (25)	16 (29)	16 (28)
123	Jackson and Edwards	13 (31)	14 (32)	14 (32)	15 (29)	15 (32)	15 (31)	14 (31)	15 (33)	15 (32)	14 (30)	14 (33)	14 (32)	15 (26)	15 (30)	15 (29)
124	Kearns and McKell	14 (31)	14 (33)	14 (32)	15 (29)	15 (32)	15 (31)	14 (31)	15 (33)	15 (32)	14 (30)	14 (33)	14 (32)	15 (26)	15 (30)	15 (29)
125	Little	13 (31)	14 (33)	14 (32)	15 (29)	14 (33)	15 (31)	14 (31)	14 (34)	15 (32)	14 (30)	14 (33)	15 (32)	15 (27)	15 (30)	15 (29)
126A	Coranton Pty Limited	12 (31)	13 (32)	14 (30)	14 (29)	14 (32)	14 (31)	14 (31)	14 (33)	14 (32)	14 (30)	14 (33)	14 (32)	15 (26)	14 (29)	14 (28)
126B	Coranton Pty Limited	13 (31)	14 (32)	14 (31)	14 (29)	15 (32)	14 (31)	14 (31)	13 (34)	14 (32)	14 (30)	14 (33)	14 (32)	15 (26)	15 (29)	15 (28)
130	Wood	13 (31)	14 (32)	14 (31)	14 (30)	14 (33)	14 (31)	14 (32)	13 (34)	14 (32)	14 (31)	14 (34)	14 (33)	14 (27)	14 (30)	14 (29)
131	Gittoes	13 (32)	13 (33)	13 (32)	14 (30)	14 (33)	14 (31)	14 (32)	14 (34)	14 (32)	14 (31)	14 (34)	14 (33)	14 (27)	14 (30)	14 (29)

Table B.3 C-WEIGHTED MINUS A-WEIGHTED RESULTS - dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
132	McLaughlin	13 (32)	13 (34)	14 (32)	14 (30)	13 (34)	15 (31)	14 (32)	14 (34)	14 (33)	14 (31)	13 (35)	14 (33)	15 (27)	14 (31)	14 (30)
137	George	12 (32)	13 (33)	13 (32)	14 (30)	14 (33)	14 (31)	14 (32)	13 (34)	13 (33)	14 (31)	13 (35)	14 (33)	14 (28)	13 (31)	13 (30)
138	Re	12 (33)	13 (33)	13 (32)	14 (30)	13 (33)	14 (31)	13 (33)	14 (34)	13 (33)	14 (31)	13 (35)	13 (34)	14 (28)	14 (31)	14 (30)
139	Logan	12 (33)	13 (34)	13 (33)	14 (30)	13 (34)	14 (32)	14 (32)	14 (34)	14 (33)	14 (31)	13 (35)	13 (34)	15 (27)	14 (31)	14 (30)
140	Logan	13 (33)	13 (34)	14 (33)	14 (31)	14 (34)	15 (32)	15 (32)	14 (34)	14 (33)	14 (31)	13 (35)	14 (33)	15 (27)	15 (31)	15 (30)
142A	Ewen	12 (34)	13 (35)	13 (33)	14 (30)	14 (32)	14 (31)	13 (32)	13 (34)	14 (32)	14 (30)	12 (36)	14 (33)	15 (27)	13 (31)	14 (29)
142B	Ewen	13 (33)	13 (34)	13 (33)	14 (31)	13 (34)	14 (32)	14 (33)	13 (35)	14 (33)	14 (31)	13 (35)	14 (33)	14 (27)	14 (31)	15 (29)
142C	Ewen	13 (33)	13 (34)	13 (33)	14 (31)	13 (34)	14 (32)	14 (33)	13 (35)	14 (33)	14 (31)	13 (35)	14 (33)	14 (27)	14 (31)	15 (29)
143A	Lawson	13 (33)	13 (35)	13 (34)	13 (31)	13 (32)	15 (30)	14 (31)	14 (33)	14 (31)	14 (30)	13 (35)	13 (33)	14 (27)	14 (30)	14 (29)
143B	Lawson	13 (33)	13 (35)	14 (33)	14 (31)	14 (34)	14 (32)	14 (33)	14 (35)	15 (33)	14 (31)	13 (36)	14 (34)	14 (28)	14 (32)	15 (30)
144	Bevan	12 (33)	13 (34)	13 (33)	14 (30)	14 (32)	15 (30)	14 (31)	13 (34)	13 (32)	14 (30)	13 (35)	14 (32)	14 (27)	14 (30)	14 (29)
145	Elsmore	12 (34)	12 (36)	13 (34)	13 (31)	13 (32)	13 (31)	13 (32)	13 (33)	13 (32)	13 (30)	12 (34)	13 (32)	14 (27)	13 (31)	14 (29)
149	McInerney	9 (42)	11 (42)	11 (41)	12 (35)	12 (38)	12 (37)	12 (36)	12 (39)	12 (38)	12 (34)	11 (38)	12 (36)	13 (32)	11 (36)	12 (34)
153	Rath	12 (29)	12 (32)	12 (31)	13 (26)	12 (32)	13 (30)	13 (27)	12 (34)	13 (31)	14 (25)	13 (31)	13 (29)	14 (23)	13 (30)	13 (29)
154	Rath	12 (30)	12 (32)	12 (31)	10 (32)	13 (32)	13 (31)	9 (33)	12 (34)	13 (32)	14 (26)	13 (32)	14 (30)	14 (23)	13 (30)	13 (29)
156B	Todhunter and Brook	12 (31)	12 (33)	13 (31)	13 (29)	12 (33)	13 (31)	13 (30)	13 (34)	13 (33)	14 (27)	14 (32)	13 (31)	14 (24)	13 (30)	14 (29)
156w	Todhunter and Brook	11 (32)	12 (33)	12 (32)	13 (30)	12 (34)	12 (32)	12 (31)	13 (34)	13 (33)	13 (28)	14 (32)	13 (31)	14 (25)	14 (30)	14 (29)
160	Dwyer	11 (34)	11 (35)	11 (34)	13 (32)	12 (34)	12 (34)	13 (32)	12 (35)	12 (34)	15 (29)	13 (34)	14 (32)	15 (25)	13 (30)	13 (29)

Table B.3 C-WEIGHTED MINUS A-WEIGHTED RESULTS - dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
162	Lamaro	12 (33)	12 (35)	13 (33)	12 (32)	13 (33)	14 (31)	13 (31)	13 (34)	13 (32)	14 (29)	13 (34)	13 (32)	14 (27)	14 (30)	13 (30)
164	Sharrock	12 (33)	13 (34)	13 (33)	14 (31)	14 (33)	14 (31)	14 (32)	14 (34)	13 (33)	14 (32)	13 (36)	13 (35)	14 (28)	14 (31)	14 (30)
165	Garton	13 (33)	13 (35)	14 (33)	15 (31)	14 (35)	15 (33)	14 (33)	14 (36)	14 (34)	14 (32)	13 (36)	13 (35)	15 (28)	15 (32)	15 (31)
169A	McCraw	12 (33)	13 (34)	13 (33)	13 (31)	13 (33)	14 (31)	13 (32)	13 (34)	13 (33)	14 (30)	14 (34)	13 (33)	15 (27)	14 (30)	15 (29)
169e	McCraw	12 (33)	13 (35)	13 (33)	12 (32)	13 (33)	14 (31)	14 (31)	13 (34)	13 (33)	14 (29)	13 (34)	14 (32)	14 (27)	14 (30)	14 (29)
170	Owens	12 (33)	13 (34)	13 (33)	13 (31)	13 (33)	14 (31)	13 (32)	14 (33)	14 (32)	14 (30)	13 (34)	13 (33)	15 (27)	13 (31)	15 (29)
171	Owens	12 (33)	13 (35)	13 (33)	12 (32)	13 (33)	13 (32)	13 (32)	13 (34)	13 (33)	15 (30)	13 (34)	13 (33)	15 (27)	14 (30)	15 (29)
174	Kastelic	13 (32)	13 (34)	14 (32)	14 (30)	13 (33)	14 (31)	13 (32)	14 (33)	14 (32)	14 (32)	13 (35)	14 (34)	15 (27)	13 (31)	15 (29)
175	Grapemen Holdings Pty Limited	13 (33)	13 (34)	13 (33)	13 (31)	13 (33)	13 (32)	14 (31)	14 (33)	14 (32)	15 (30)	13 (35)	13 (34)	15 (27)	14 (31)	14 (30)
176	Grapemen Holdings Pty Limited	13 (32)	13 (34)	13 (33)	13 (31)	13 (33)	13 (32)	14 (31)	13 (34)	13 (33)	14 (31)	13 (35)	14 (34)	15 (27)	14 (31)	14 (30)
177B	Tulloch	13 (32)	14 (33)	13 (33)	14 (30)	14 (32)	15 (31)	13 (32)	14 (34)	14 (33)	14 (31)	14 (34)	13 (34)	16 (26)	14 (30)	14 (30)
177A	Tulloch	13 (32)	13 (34)	13 (33)	14 (30)	14 (32)	15 (31)	13 (32)	14 (33)	14 (33)	15 (30)	13 (34)	14 (33)	16 (26)	14 (30)	14 (30)
179	Brooks and Thompson	12 (34)	12 (36)	13 (34)	12 (33)	12 (34)	13 (33)	13 (32)	13 (35)	13 (34)	14 (31)	13 (34)	14 (33)	14 (28)	14 (31)	15 (30)
183	Foster	13 (33)	13 (34)	13 (33)	12 (32)	13 (33)	14 (32)	13 (32)	13 (34)	13 (33)	14 (31)	13 (35)	13 (34)	15 (27)	14 (31)	14 (30)
184	Esslemont Family Holdings PTY Limited	13 (33)	12 (35)	13 (33)	13 (32)	13 (33)	13 (33)	13 (32)	13 (34)	13 (34)	15 (30)	13 (35)	13 (34)	15 (27)	14 (31)	14 (30)
185	Poulos	13 (33)	13 (34)	13 (33)	13 (31)	13 (33)	14 (32)	13 (32)	13 (34)	13 (33)	15 (30)	13 (34)	13 (34)	15 (27)	14 (31)	14 (30)

Table B.3 C-WEIGHTED MINUS A-WEIGHTED RESULTS - dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
188C	Tulloch	12 (33)	13 (34)	13 (33)	13 (31)	14 (32)	13 (32)	13 (32)	13 (34)	13 (33)	15 (30)	13 (34)	14 (33)	16 (26)	14 (31)	14 (30)
188A	Tulloch	13 (32)	13 (34)	13 (33)	13 (31)	14 (32)	13 (32)	13 (32)	14 (33)	14 (32)	15 (30)	13 (34)	14 (33)	16 (26)	14 (31)	14 (30)
188B	Tulloch	12 (33)	13 (34)	13 (33)	13 (31)	14 (32)	13 (32)	13 (32)	13 (34)	13 (33)	15 (30)	13 (34)	14 (33)	16 (26)	14 (31)	14 (30)
190	Gallagher	14 (30)	13 (33)	14 (32)	15 (29)	15 (32)	15 (32)	15 (32)	15 (30)	15 (33)	16 (29)	14 (33)	15 (32)	16 (25)	16 (29)	16 (28)
191	Robards and Myers	14 (31)	14 (33)	14 (32)	16 (29)	14 (33)	15 (32)	15 (33)	15 (30)	14 (34)	16 (29)	14 (33)	15 (32)	16 (25)	16 (29)	16 (28)
192	Carr	13 (31)	14 (33)	14 (32)	15 (29)	14 (33)	15 (32)	15 (33)	15 (30)	15 (33)	15 (29)	15 (32)	15 (32)	16 (25)	15 (29)	16 (28)
193	Britten and Herlihy	15 (30)	15 (32)	14 (32)	16 (29)	15 (32)	15 (32)	15 (32)	16 (30)	15 (33)	16 (29)	15 (32)	16 (31)	16 (25)	17 (28)	16 (28)
194	Smith	17 (12)	17 (12)	17 (12)	17 (11)	17 (12)	17 (11)	17 (11)	17 (11)	18 (11)	16 (10)	18 (10)	17 (10)	13 (10)	14 (10)	14 (10)
195	Kennedy	11 (35)	13 (34)	12 (34)	13 (32)	13 (34)	13 (33)	13 (34)	13 (32)	13 (34)	15 (30)	12 (36)	13 (34)	15 (25)	13 (30)	13 (29)
197	Kennedy	11 (34)	13 (34)	12 (34)	12 (33)	13 (33)	14 (32)	13 (33)	14 (31)	13 (34)	13 (32)	13 (35)	13 (34)	15 (26)	14 (31)	14 (30)
198	Orton	13 (32)	14 (34)	13 (34)	15 (30)	14 (33)	16 (31)	15 (33)	14 (31)	15 (34)	15 (30)	14 (34)	14 (33)	15 (26)	15 (30)	15 (30)
199	Gould	14 (32)	15 (33)	14 (33)	15 (30)	15 (33)	15 (32)	15 (33)	15 (31)	15 (34)	15 (30)	15 (33)	15 (33)	17 (25)	16 (30)	17 (29)
200	Benchoam	13 (32)	13 (34)	14 (33)	15 (29)	14 (33)	15 (31)	15 (33)	14 (31)	14 (34)	15 (30)	14 (33)	14 (33)	15 (26)	15 (30)	15 (29)
202	Lakayev	14 (30)	14 (32)	13 (32)	14 (29)	14 (33)	14 (32)	15 (32)	15 (29)	15 (33)	15 (29)	15 (31)	14 (31)	16 (24)	15 (28)	16 (27)
203	Schipper	13 (31)	14 (33)	14 (32)	15 (29)	14 (33)	15 (32)	15 (33)	15 (30)	15 (33)	15 (29)	15 (32)	14 (32)	15 (26)	15 (29)	16 (28)
204	Leonard	14 (27)	15 (27)	15 (26)	16 (24)	15 (26)	16 (25)	16 (25)	16 (24)	16 (26)	15 (24)	15 (27)	15 (26)	17 (16)	16 (20)	16 (19)
206	Helliker	14 (27)	15 (26)	15 (26)	16 (24)	15 (26)	16 (25)	16 (25)	16 (24)	15 (26)	15 (24)	16 (27)	15 (27)	16 (17)	16 (21)	16 (20)

Table B.3 C-WEIGHTED MINUS A-WEIGHTED RESULTS - dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
207	Carr Thompson and Shearim	14 (27)	15 (26)	15 (25)	16 (24)	15 (26)	16 (25)	16 (24)	16 (25)	16 (25)	16 (24)	15 (28)	15 (27)	16 (17)	16 (21)	16 (20)
208	Leslie	13 (27)	15 (26)	15 (25)	15 (25)	15 (26)	16 (25)	16 (24)	16 (25)	16 (25)	16 (24)	16 (27)	15 (27)	16 (17)	16 (21)	16 (20)
209	Leslie	14 (26)	15 (26)	15 (25)	15 (25)	15 (26)	16 (25)	16 (24)	16 (25)	16 (25)	15 (25)	16 (27)	15 (27)	16 (17)	16 (21)	16 (20)
211	Brennan	12 (32)	13 (34)	14 (33)	15 (29)	14 (33)	14 (32)	14 (31)	14 (34)	15 (33)	15 (30)	14 (33)	14 (33)	16 (26)	15 (29)	15 (29)
212	Icelink PTY Limited	13 (32)	13 (34)	14 (33)	15 (29)	14 (33)	14 (32)	14 (31)	14 (34)	15 (33)	15 (30)	14 (33)	14 (33)	15 (27)	15 (29)	15 (29)
213	Icelink PTY Limited	14 (30)	14 (33)	14 (32)	16 (28)	14 (33)	15 (31)	15 (30)	15 (33)	15 (32)	15 (30)	14 (32)	14 (32)	16 (26)	16 (28)	15 (28)
214	Sydney Gas Operations PTY Ltd	14 (29)	14 (32)	14 (31)	15 (28)	14 (32)	15 (31)	16 (29)	15 (32)	15 (32)	15 (29)	15 (31)	15 (31)	15 (26)	15 (28)	16 (27)
217s	Russell	11 (36)	12 (36)	13 (35)	13 (32)	14 (33)	15 (32)	14 (32)	13 (34)	13 (34)	13 (32)	13 (36)	13 (36)	14 (26)	13 (32)	14 (31)
217m	Russell	11 (36)	12 (35)	13 (34)	14 (30)	15 (32)	15 (32)	15 (30)	14 (33)	14 (33)	14 (32)	13 (35)	13 (35)	14 (26)	13 (32)	13 (32)
217n	Russell	10 (37)	11 (37)	12 (36)	13 (31)	15 (31)	15 (31)	12 (33)	14 (32)	14 (32)	15 (28)	13 (35)	13 (34)	15 (22)	13 (30)	14 (29)
220	Purser and Keayes	13 (33)	13 (35)	13 (35)	15 (30)	14 (34)	15 (33)	15 (31)	14 (34)	14 (34)	14 (31)	14 (33)	14 (33)	16 (26)	16 (29)	15 (29)
221	Brasington	14 (32)	14 (34)	13 (34)	15 (30)	14 (34)	15 (33)	14 (31)	15 (33)	15 (33)	15 (30)	14 (33)	14 (33)	15 (27)	16 (29)	16 (29)
222	Vassallo	13 (33)	12 (36)	13 (35)	15 (30)	14 (34)	15 (33)	14 (32)	14 (34)	14 (34)	14 (31)	14 (34)	13 (34)	15 (26)	15 (30)	14 (30)
223	Jackson	13 (33)	13 (35)	13 (35)	16 (30)	14 (34)	14 (34)	14 (32)	14 (34)	14 (34)	14 (31)	15 (33)	15 (33)	15 (27)	15 (30)	16 (29)
225	Harris	15 (30)	14 (32)	14 (32)	15 (30)	15 (32)	15 (32)	16 (30)	15 (32)	15 (32)	16 (29)	16 (31)	16 (31)	17 (26)	16 (28)	16 (28)
226	Vassallo	13 (34)	13 (36)	12 (36)	15 (31)	14 (34)	14 (34)	14 (32)	15 (34)	14 (34)	14 (31)	14 (34)	14 (34)	15 (26)	14 (30)	14 (30)
227	Beavis	13 (33)	12 (36)	13 (35)	15 (31)	14 (34)	14 (34)	14 (32)	14 (34)	14 (34)	14 (31)	14 (34)	14 (34)	16 (26)	15 (30)	16 (29)

Table B.3 C-WEIGHTED MINUS A-WEIGHTED RESULTS - dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
228	Lamb	13 (34)	13 (36)	13 (35)	15 (31)	14 (34)	14 (34)	14 (33)	15 (34)	14 (34)	14 (31)	14 (34)	14 (34)	16 (26)	15 (30)	15 (30)
229	Ritchie	13 (34)	12 (36)	13 (35)	15 (31)	14 (34)	14 (34)	14 (33)	15 (34)	15 (34)	15 (31)	14 (34)	14 (34)	15 (27)	15 (30)	16 (29)
230	Cant	13 (34)	12 (37)	13 (36)	14 (32)	14 (35)	14 (35)	13 (34)	14 (35)	14 (35)	14 (32)	13 (35)	14 (34)	15 (27)	15 (30)	15 (30)
231	Dawson	13 (34)	13 (36)	14 (35)	14 (32)	14 (35)	13 (35)	14 (33)	15 (34)	15 (34)	15 (31)	14 (34)	14 (34)	16 (27)	15 (30)	15 (30)
232	Medhurst	12 (35)	12 (37)	12 (37)	14 (32)	13 (36)	13 (36)	13 (34)	14 (35)	14 (35)	14 (32)	14 (35)	13 (35)	15 (28)	14 (32)	14 (32)
233	Vikas	12 (35)	13 (36)	13 (36)	14 (32)	14 (35)	14 (35)	13 (34)	14 (35)	14 (35)	14 (32)	13 (35)	14 (34)	15 (27)	15 (31)	15 (31)
234	Thompson	12 (35)	12 (37)	13 (36)	14 (32)	13 (36)	14 (35)	14 (33)	14 (35)	15 (34)	15 (31)	14 (35)	15 (34)	16 (27)	15 (31)	15 (31)
235	Caban	13 (34)	13 (36)	13 (36)	14 (32)	14 (35)	13 (35)	14 (33)	14 (34)	14 (34)	16 (30)	14 (34)	14 (34)	17 (27)	16 (30)	16 (30)
236	Krey	13 (33)	14 (35)	14 (35)	15 (31)	14 (34)	14 (34)	14 (33)	15 (33)	15 (33)	16 (30)	15 (33)	15 (33)	17 (27)	16 (30)	16 (30)
237	Ryan and Harrison	13 (34)	13 (36)	13 (36)	14 (32)	13 (36)	13 (36)	14 (33)	15 (34)	15 (34)	15 (31)	14 (34)	14 (34)	15 (28)	15 (31)	15 (31)
238	Topham	13 (33)	14 (35)	14 (35)	14 (32)	13 (35)	13 (35)	14 (33)	14 (34)	14 (34)	15 (30)	15 (33)	15 (33)	16 (27)	16 (30)	16 (30)
239	Waters	12 (34)	12 (36)	12 (36)	14 (30)	14 (33)	13 (33)	14 (31)	14 (32)	14 (32)	14 (30)	13 (33)	13 (33)	16 (24)	15 (27)	15 (27)
240	Godyn	12 (34)	13 (36)	13 (36)	15 (31)	13 (36)	13 (36)	14 (33)	14 (34)	14 (34)	15 (31)	14 (34)	14 (34)	15 (28)	15 (31)	15 (31)
241	Kaizer	13 (33)	13 (36)	13 (35)	15 (31)	14 (35)	14 (35)	15 (32)	14 (34)	14 (34)	16 (30)	15 (33)	15 (33)	16 (27)	15 (30)	15 (30)
242	Bridge	13 (33)	14 (35)	13 (35)	15 (31)	13 (35)	13 (35)	15 (32)	15 (33)	15 (33)	16 (30)	15 (33)	15 (33)	16 (27)	15 (30)	15 (30)
243	Neville	13 (33)	13 (35)	13 (35)	15 (31)	14 (35)	14 (35)	14 (32)	15 (33)	15 (33)	15 (30)	15 (33)	15 (33)	16 (27)	15 (30)	15 (30)
244	Caban	13 (32)	14 (34)	14 (34)	15 (30)	14 (34)	14 (34)	15 (31)	14 (33)	14 (33)	16 (29)	15 (32)	15 (32)	16 (27)	15 (29)	15 (29)
247	Upward	14 (31)	14 (33)	14 (33)	15 (30)	15 (33)	15 (33)	16 (30)	15 (32)	15 (32)	16 (29)	16 (31)	16 (31)	17 (26)	16 (28)	16 (28)

Table B.3 C-WEIGHTED MINUS A-WEIGHTED RESULTS - dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
250	Icelink PTY Limited	13 (32)	13 (35)	13 (34)	15 (30)	14 (34)	14 (33)	14 (31)	15 (33)	15 (33)	14 (31)	14 (33)	14 (33)	15 (27)	16 (29)	15 (29)
254	Mitchell	13 (32)	13 (35)	13 (35)	14 (31)	13 (35)	13 (35)	14 (32)	15 (33)	15 (33)	15 (30)	15 (32)	15 (32)	15 (27)	15 (29)	15 (29)
256	Cameron	13 (32)	13 (34)	13 (34)	15 (30)	14 (34)	14 (34)	15 (31)	14 (33)	14 (33)	15 (30)	15 (32)	15 (32)	15 (27)	16 (28)	16 (28)
261	Smith	13 (33)	13 (36)	13 (36)	14 (32)	13 (36)	13 (36)	14 (33)	14 (34)	14 (34)	15 (31)	13 (34)	13 (34)	16 (27)	15 (30)	15 (30)
262	Smith	12 (33)	12 (36)	12 (36)	14 (32)	13 (36)	13 (36)	14 (33)	14 (34)	14 (34)	15 (31)	14 (33)	14 (33)	16 (27)	15 (30)	15 (30)
263	Reid	12 (33)	12 (36)	12 (36)	14 (32)	13 (36)	13 (36)	15 (32)	14 (34)	14 (34)	15 (31)	14 (33)	14 (33)	16 (27)	15 (30)	15 (30)
264	Reid	12 (33)	12 (36)	12 (36)	14 (32)	13 (36)	13 (36)	14 (33)	14 (34)	14 (34)	15 (31)	14 (33)	14 (33)	16 (27)	15 (30)	15 (30)
265	Turnbull	12 (33)	13 (35)	13 (35)	14 (32)	13 (36)	13 (36)	15 (32)	14 (34)	14 (34)	14 (31)	14 (33)	14 (33)	16 (27)	16 (29)	16 (29)
266	Hedley and Louis	12 (33)	13 (35)	13 (35)	14 (32)	13 (36)	13 (36)	15 (32)	14 (34)	14 (34)	14 (31)	14 (33)	14 (33)	15 (27)	16 (29)	16 (29)
267	Powis	12 (33)	13 (35)	13 (35)	14 (32)	14 (35)	14 (35)	15 (32)	14 (34)	14 (34)	14 (31)	14 (33)	14 (33)	15 (27)	16 (29)	16 (29)
272	Bulga Community Centre Incorporated	12 (33)	13 (35)	13 (35)	14 (32)	13 (36)	13 (36)	15 (32)	14 (34)	14 (34)	14 (31)	14 (33)	14 (33)	15 (27)	16 (29)	16 (29)
273	Silk	12 (33)	13 (35)	13 (35)	14 (32)	14 (35)	14 (35)	15 (32)	14 (34)	14 (34)	14 (31)	14 (33)	14 (33)	15 (27)	16 (29)	16 (29)
274	Messrs Dragicevic	13 (33)	13 (35)	13 (35)	14 (32)	14 (35)	14 (35)	15 (32)	14 (34)	14 (34)	14 (31)	14 (33)	14 (33)	15 (27)	16 (29)	16 (29)
275	Dragicevic	12 (33)	13 (35)	13 (35)	14 (32)	14 (35)	14 (35)	15 (32)	14 (34)	14 (34)	14 (31)	14 (33)	14 (33)	15 (27)	16 (29)	16 (29)
276	Cooke	12 (33)	13 (35)	13 (35)	14 (32)	14 (35)	14 (35)	15 (32)	14 (34)	14 (34)	14 (31)	14 (33)	14 (33)	16 (26)	15 (29)	15 (29)
277	Grainger	12 (33)	13 (35)	13 (35)	14 (32)	14 (35)	14 (35)	15 (32)	14 (34)	14 (34)	14 (31)	14 (33)	14 (33)	16 (26)	15 (29)	15 (29)
279	Bendall	12 (33)	13 (35)	13 (35)	14 (32)	14 (35)	14 (35)	15 (32)	14 (34)	14 (34)	14 (31)	14 (33)	14 (33)	15 (27)	16 (29)	16 (29)

Table B.3 C-WEIGHTED MINUS A-WEIGHTED RESULTS - dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
280	Magin	12 (33)	13 (35)	13 (35)	14 (32)	14 (35)	14 (35)	15 (32)	14 (34)	14 (34)	14 (31)	14 (33)	14 (33)	15 (27)	15 (29)	15 (29)
281	Harris and Ferguson	12 (33)	13 (35)	13 (35)	14 (32)	13 (35)	13 (35)	15 (32)	14 (34)	14 (34)	14 (31)	14 (33)	14 (33)	15 (27)	15 (29)	15 (29)
283	Saunders	13 (32)	13 (35)	13 (35)	14 (32)	13 (35)	13 (35)	15 (32)	15 (33)	15 (33)	15 (30)	14 (33)	14 (33)	16 (26)	15 (29)	15 (29)
284	Nichols and Anderson	13 (32)	13 (35)	13 (35)	14 (32)	13 (35)	13 (35)	14 (32)	15 (33)	15 (33)	15 (30)	15 (32)	15 (32)	16 (26)	15 (29)	15 (29)
285	Harris	13 (32)	13 (35)	13 (35)	14 (32)	13 (35)	13 (35)	14 (32)	15 (33)	15 (33)	15 (30)	15 (32)	15 (32)	16 (26)	15 (29)	15 (29)
286	McLachlan	13 (32)	13 (35)	13 (35)	14 (32)	13 (35)	13 (35)	14 (32)	15 (33)	15 (33)	15 (30)	15 (32)	15 (32)	16 (26)	15 (29)	15 (29)
287	McLaughlin	13 (32)	13 (35)	13 (35)	14 (32)	13 (35)	13 (35)	14 (32)	14 (33)	14 (33)	15 (30)	15 (32)	15 (32)	16 (26)	15 (29)	15 (29)
288	Ford	12 (33)	13 (35)	13 (35)	14 (32)	13 (35)	13 (35)	15 (32)	14 (34)	14 (34)	15 (30)	14 (33)	14 (33)	16 (26)	15 (29)	15 (29)
289	Pringle	13 (32)	14 (34)	14 (34)	15 (31)	14 (34)	14 (34)	15 (31)	14 (33)	14 (33)	15 (30)	15 (32)	15 (32)	16 (26)	16 (28)	16 (28)
290	Janse van Rensburg	13 (32)	14 (34)	14 (34)	15 (31)	14 (34)	14 (34)	15 (31)	14 (33)	14 (33)	15 (30)	15 (32)	15 (32)	16 (26)	16 (28)	16 (28)
291	Adamthwaite	13 (32)	14 (34)	14 (34)	15 (31)	14 (34)	14 (34)	15 (31)	14 (33)	14 (33)	15 (30)	15 (32)	15 (32)	16 (26)	16 (28)	16 (28)
292	Evans	13 (32)	13 (35)	13 (35)	15 (31)	14 (34)	14 (34)	14 (32)	15 (33)	15 (33)	15 (30)	15 (32)	15 (32)	16 (26)	16 (28)	16 (28)
293	Gallagher	13 (32)	14 (34)	14 (34)	15 (31)	14 (34)	14 (34)	15 (31)	14 (33)	14 (33)	15 (30)	15 (32)	15 (32)	16 (26)	16 (28)	16 (28)
294	Brown	13 (32)	14 (34)	14 (34)	15 (31)	14 (34)	14 (34)	15 (31)	14 (33)	14 (33)	15 (30)	15 (32)	15 (32)	16 (26)	16 (28)	16 (28)
295	Carnevale Testa Angelatos	13 (32)	13 (34)	13 (34)	15 (31)	14 (34)	14 (34)	15 (31)	14 (33)	14 (33)	15 (30)	14 (32)	14 (32)	16 (26)	16 (28)	16 (28)
296	Burgess	13 (32)	14 (34)	14 (34)	15 (31)	14 (34)	14 (34)	15 (31)	15 (32)	15 (32)	15 (30)	16 (31)	16 (31)	16 (26)	16 (28)	16 (28)
297	Fogwell	13 (32)	14 (34)	14 (34)	15 (31)	14 (34)	14 (34)	15 (31)	15 (32)	15 (32)	15 (30)	16 (31)	16 (31)	16 (26)	16 (28)	16 (28)

Table B.3 C-WEIGHTED MINUS A-WEIGHTED RESULTS - dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
298	Player	13 (29)	13 (32)	13 (32)	14 (28)	14 (30)	14 (30)	15 (28)	15 (29)	15 (29)	16 (24)	15 (26)	15 (26)	17 (21)	16 (23)	16 (23)
300	Price	13 (27)	14 (27)	14 (27)	15 (23)	16 (25)	16 (25)	16 (23)	16 (25)	16 (25)	15 (23)	15 (26)	15 (26)	16 (18)	16 (21)	16 (21)
301	Powell and Shannon	13 (27)	14 (26)	14 (26)	16 (22)	15 (24)	15 (24)	16 (23)	15 (25)	15 (25)	16 (22)	15 (25)	15 (25)	16 (18)	16 (21)	15 (21)
302	Harrison	13 (28)	14 (28)	14 (28)	15 (26)	16 (28)	16 (28)	15 (26)	15 (27)	15 (27)	16 (23)	15 (26)	15 (26)	16 (19)	16 (22)	16 (22)
303	McKenzie	14 (30)	14 (32)	14 (32)	15 (28)	15 (30)	15 (30)	15 (29)	15 (30)	15 (30)	15 (28)	15 (30)	15 (30)	16 (23)	16 (25)	16 (25)
304	Banks	14 (30)	14 (33)	14 (33)	15 (30)	15 (32)	15 (32)	15 (30)	16 (31)	16 (31)	15 (29)	16 (30)	16 (30)	17 (25)	16 (27)	16 (27)
305	Anderson	14 (30)	14 (32)	14 (32)	15 (30)	15 (32)	15 (32)	15 (30)	15 (31)	15 (31)	15 (29)	16 (30)	16 (30)	17 (25)	16 (27)	16 (27)
306	Gregory	13 (32)	13 (35)	13 (35)	15 (31)	13 (35)	14 (34)	14 (32)	15 (33)	15 (33)	15 (30)	15 (32)	15 (32)	16 (26)	16 (28)	16 (28)
307	Mobberley	12 (34)	12 (36)	12 (36)	14 (32)	13 (36)	13 (36)	14 (32)	14 (35)	14 (35)	14 (30)	13 (34)	13 (34)	15 (25)	14 (31)	14 (31)
308	Renaud	12 (33)	13 (35)	13 (35)	14 (32)	14 (35)	14 (35)	14 (32)	13 (35)	13 (35)	14 (30)	14 (33)	14 (33)	15 (25)	15 (30)	15 (30)
309	Louis	13 (31)	14 (33)	14 (33)	15 (30)	14 (33)	14 (33)	15 (30)	15 (32)	15 (32)	15 (29)	15 (31)	15 (31)	16 (25)	16 (27)	16 (27)
311	Mulally McMaugh Burke	12 (32)	13 (34)	13 (34)	15 (31)	13 (35)	13 (35)	14 (31)	14 (34)	14 (34)	15 (29)	13 (33)	14 (32)	16 (24)	15 (30)	15 (30)
314	Hanson	13 (31)	14 (33)	14 (33)	15 (30)	15 (32)	15 (32)	15 (30)	15 (32)	15 (32)	15 (29)	15 (31)	15 (31)	16 (25)	16 (27)	16 (27)
316B	Caban	13 (31)	14 (33)	14 (33)	15 (30)	14 (33)	14 (33)	15 (30)	15 (32)	15 (32)	15 (29)	15 (31)	15 (31)	16 (25)	16 (27)	16 (27)
316A	Caban	14 (30)	14 (33)	14 (33)	15 (30)	15 (32)	15 (32)	15 (30)	14 (32)	14 (32)	16 (28)	15 (30)	15 (30)	16 (25)	16 (27)	16 (27)
317	Lancaster	14 (30)	14 (33)	14 (33)	15 (30)	14 (33)	14 (33)	15 (30)	15 (32)	15 (32)	15 (29)	14 (31)	14 (31)	16 (24)	15 (28)	15 (28)
319B	Estvale Holdings Pty Ltd	10 (33)	12 (35)	12 (33)	12 (32)	12 (34)	13 (33)	12 (31)	13 (33)	12 (33)	13 (28)	13 (32)	12 (32)	13 (25)	13 (31)	13 (30)
319A	Estvale Holdings Pty Ltd	12 (32)	12 (35)	12 (34)	12 (32)	12 (34)	12 (34)	12 (31)	12 (34)	13 (33)	13 (28)	13 (32)	13 (32)	13 (25)	12 (32)	13 (30)

Table B.3 C-WEIGHTED MINUS A-WEIGHTED RESULTS - dB

Receptor ID	Receptor Name	Year 1			Year 4			Year 7			Year 13			Year 19		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
323	Poulsen	11 (31)	11 (33)	10 (34)	11 (35)	10 (37)	10 (37)	13 (33)	12 (35)	12 (35)	13 (30)	14 (31)	13 (32)	14 (29)	13 (31)	13 (32)
324	Wood	12 (28)	10 (31)	10 (32)	11 (33)	11 (35)	10 (36)	13 (30)	13 (32)	12 (33)	16 (25)	15 (28)	15 (29)	16 (23)	14 (27)	14 (28)
325	Ancich	11 (31)	11 (33)	10 (34)	11 (34)	11 (36)	10 (37)	13 (31)	12 (34)	12 (35)	14 (28)	13 (31)	13 (32)	15 (25)	13 (30)	13 (31)
326	McNaught	13 (27)	14 (26)	14 (26)	16 (21)	16 (24)	16 (24)	16 (22)	16 (24)	16 (24)	16 (21)	15 (24)	15 (24)	17 (16)	17 (19)	17 (19)

Note: 1. Receptor 149 currently has rights to acquisition upon request;

2. Bolded results indicates results with C minus A $\geq$ 15 dB, and, $L_{Aeq,15 \text{ minute}} > 30 \text{ dB}$; and

3. Bracketed results indicate $L_{Aeq,15 \text{ minute}}$ level.

APPENDIX

C. MODELLED SOURCE LOCATIONS

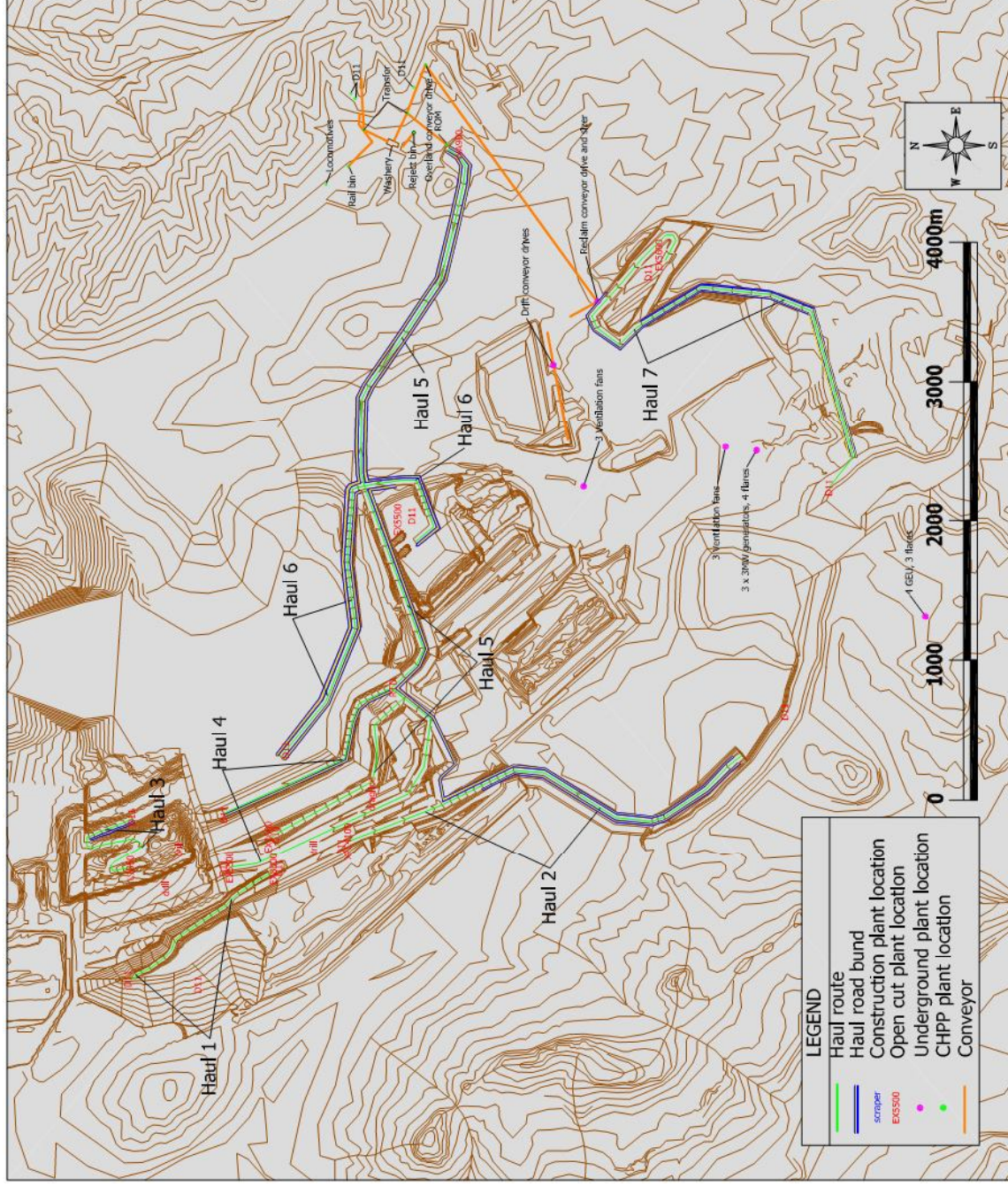


Figure C.1 Source and Bund Locations, Year 1 Day Scenario

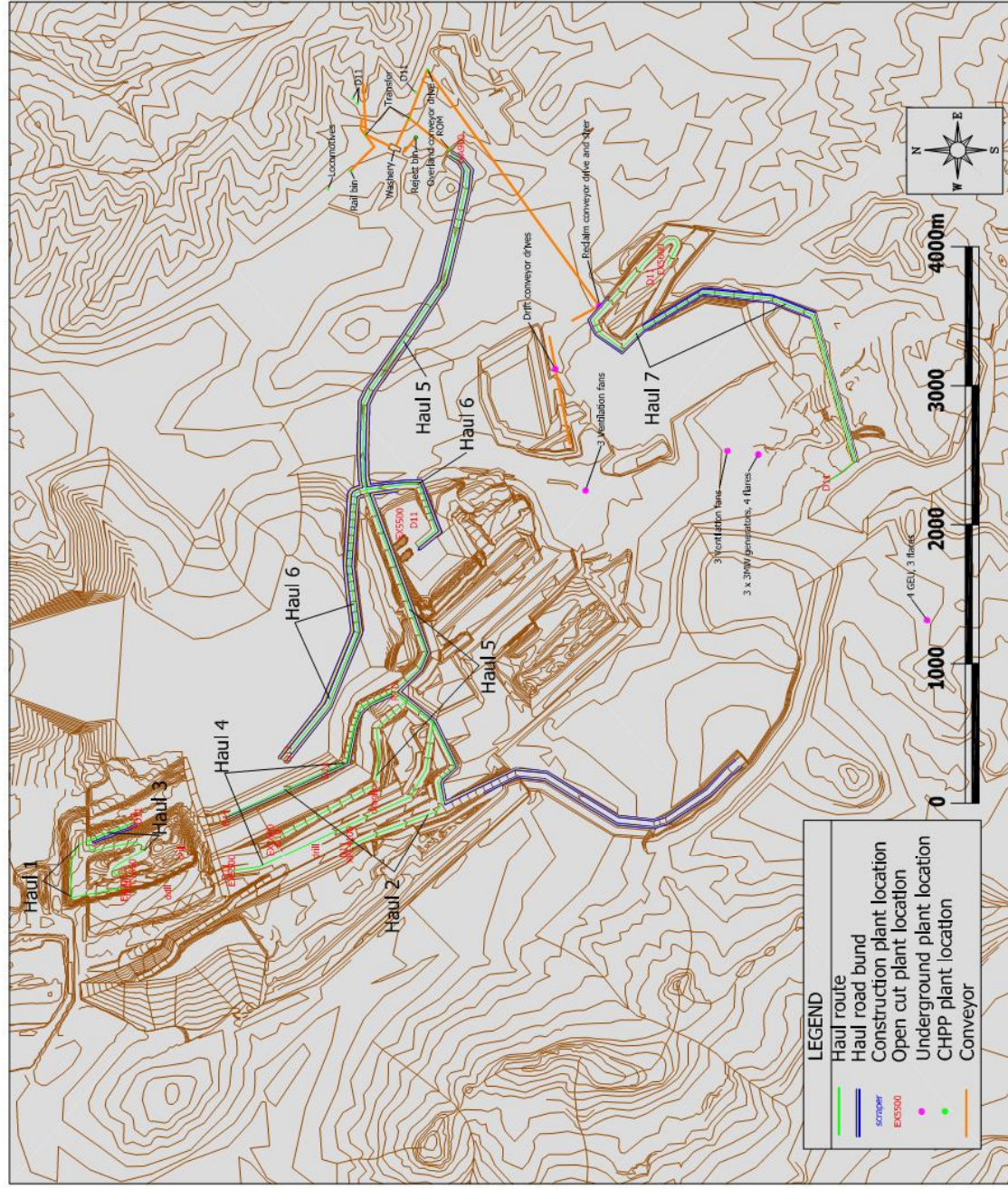
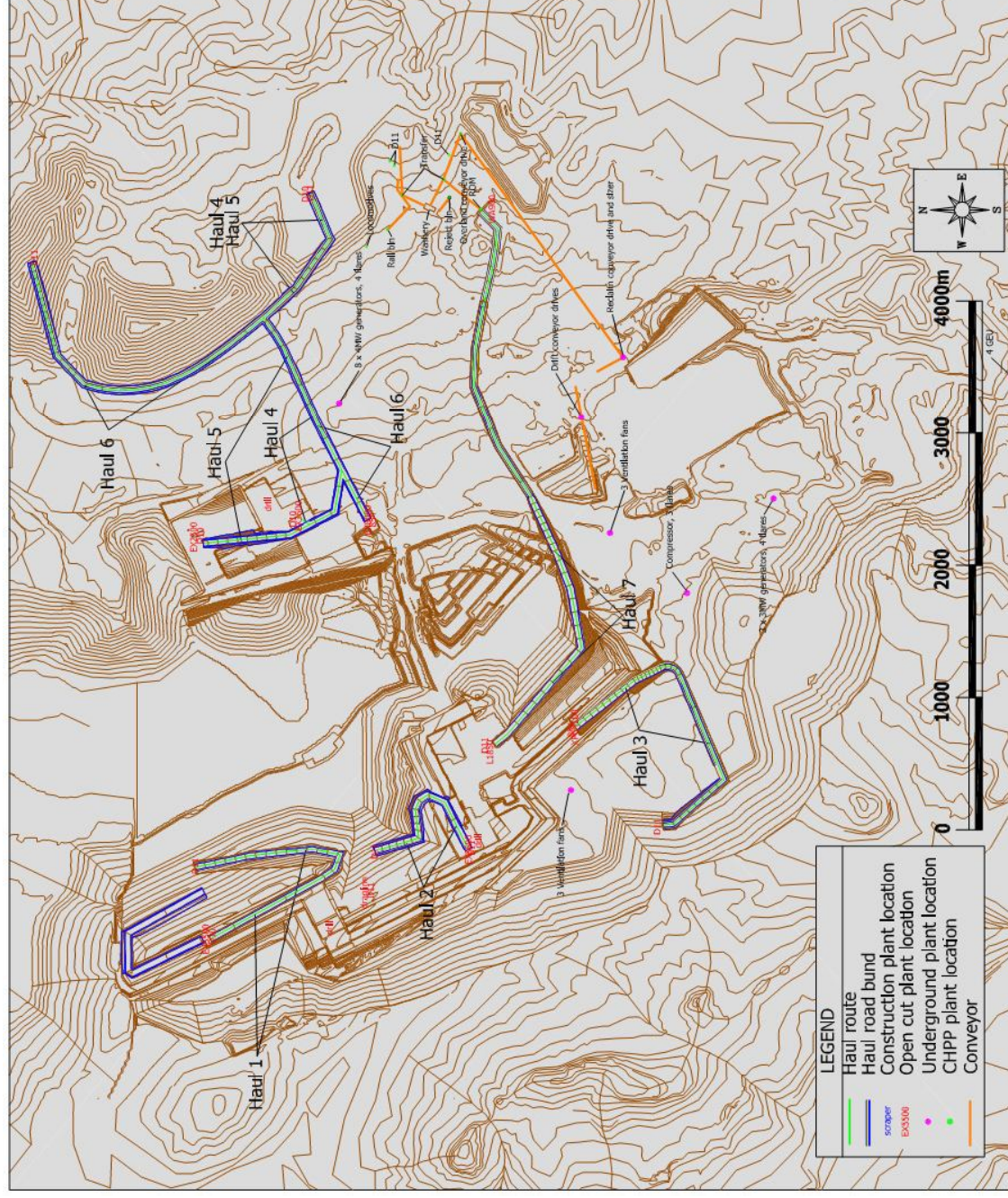


Figure C.2 Source and Bund Locations, Year 1 Evening/Night Scenario



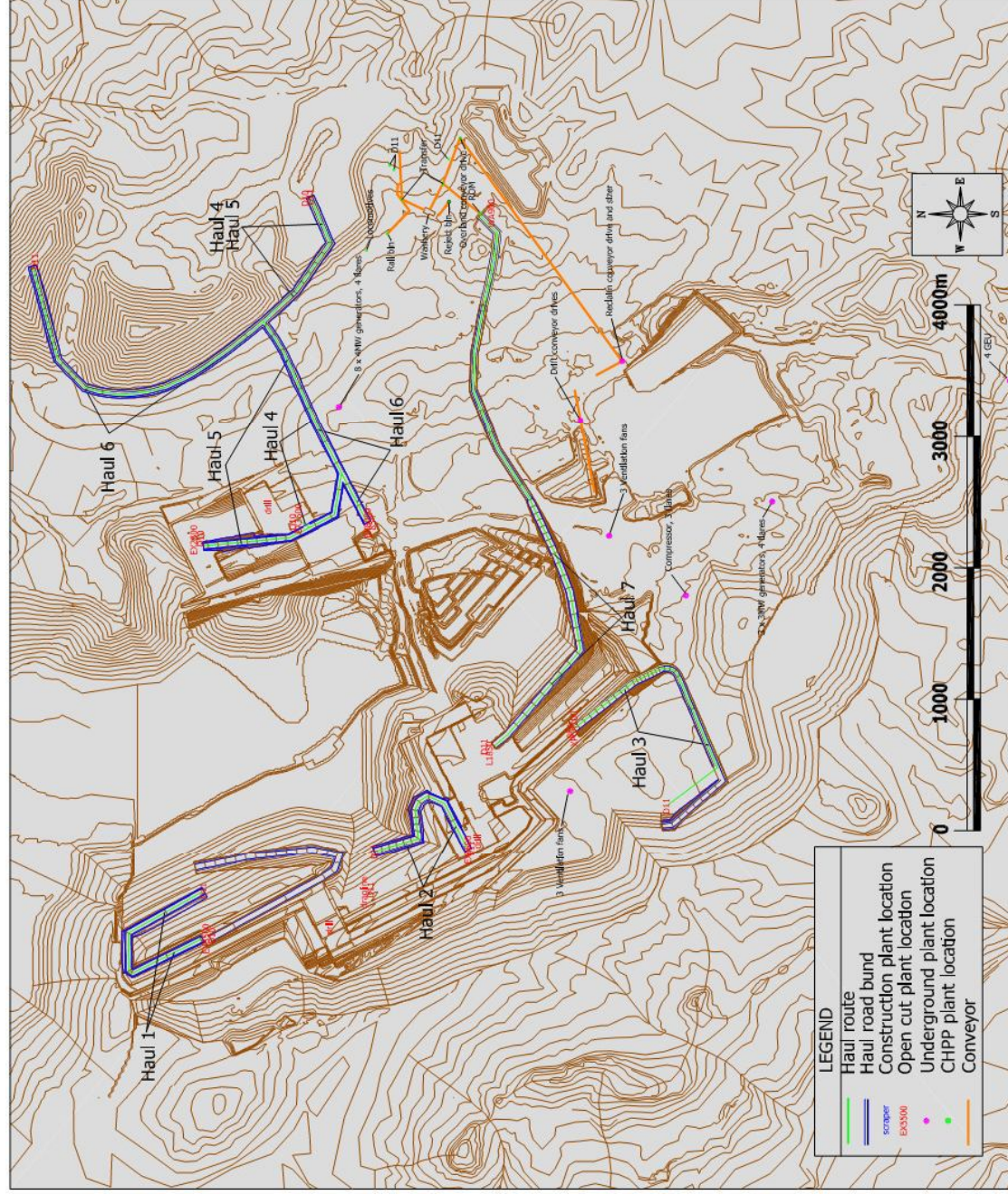


Figure C.4 Source and Bund Locations, Year 4 Evening/Night Scenario

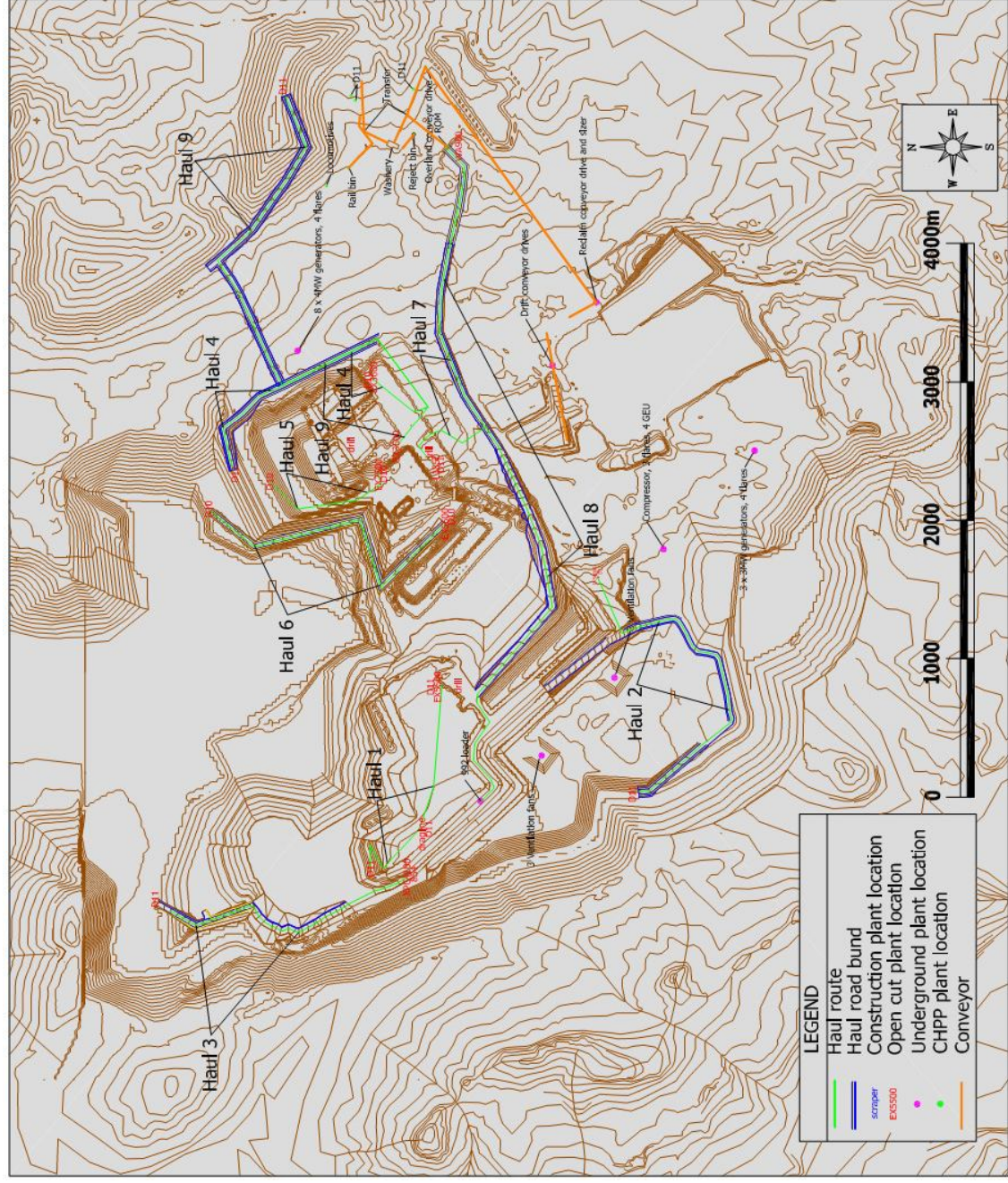


Figure C.5 Source and Bund Locations, Year 7 Day Scenario

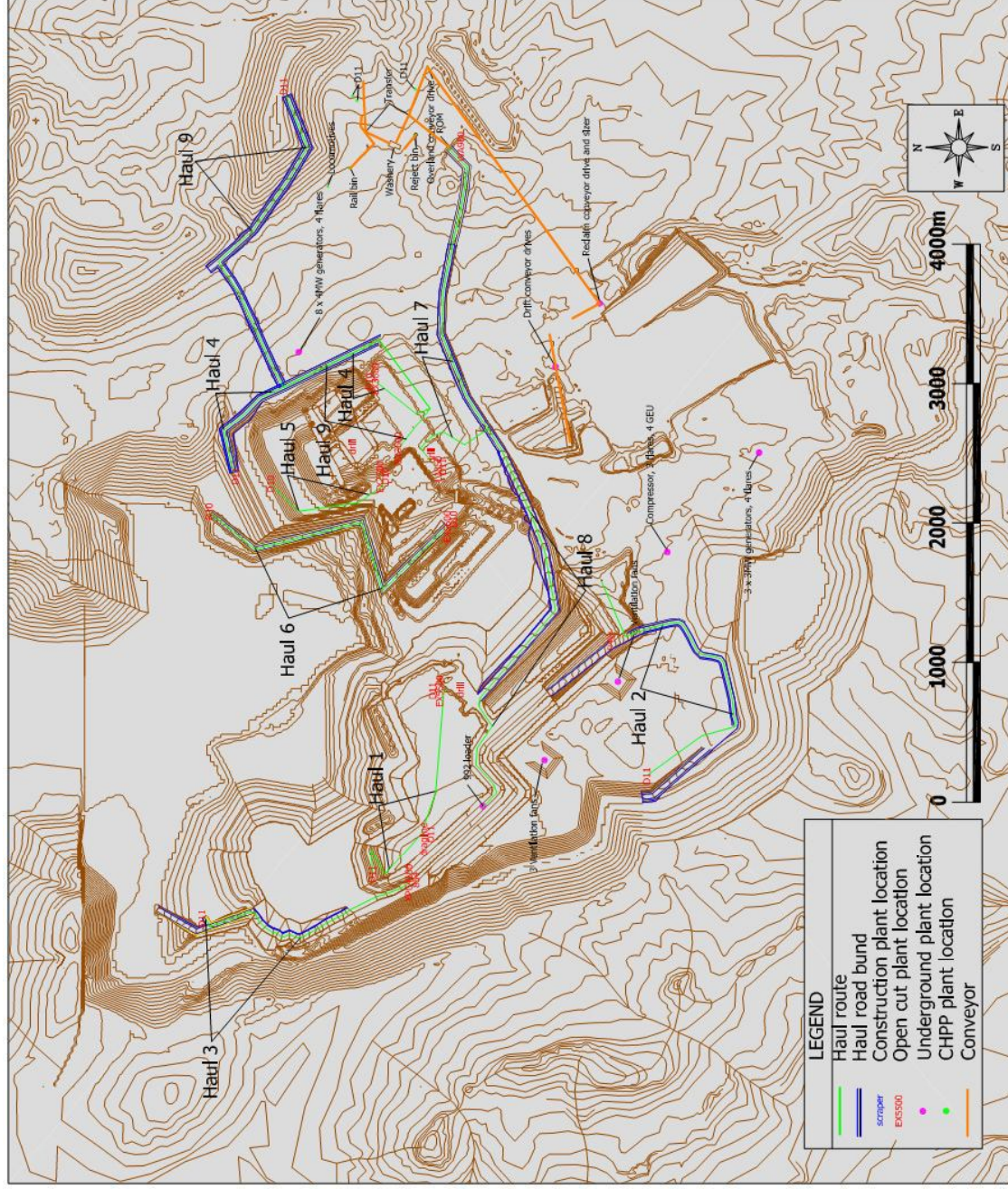


Figure C.6 Source and Bund Locations, Year 7 Evening/Night Scenario

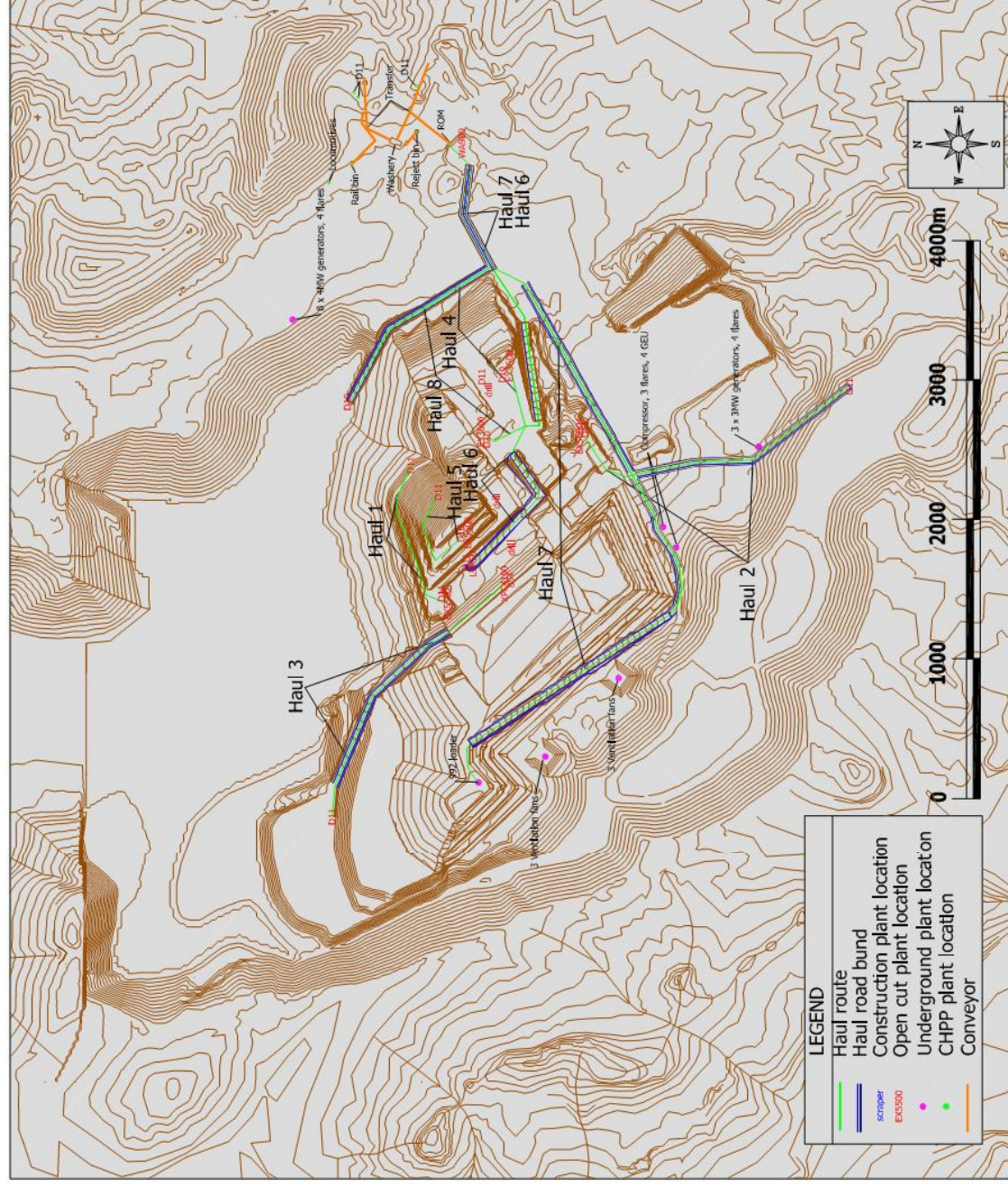


Figure C.7 Source and Bund Locations, Year 13 Day Scenario

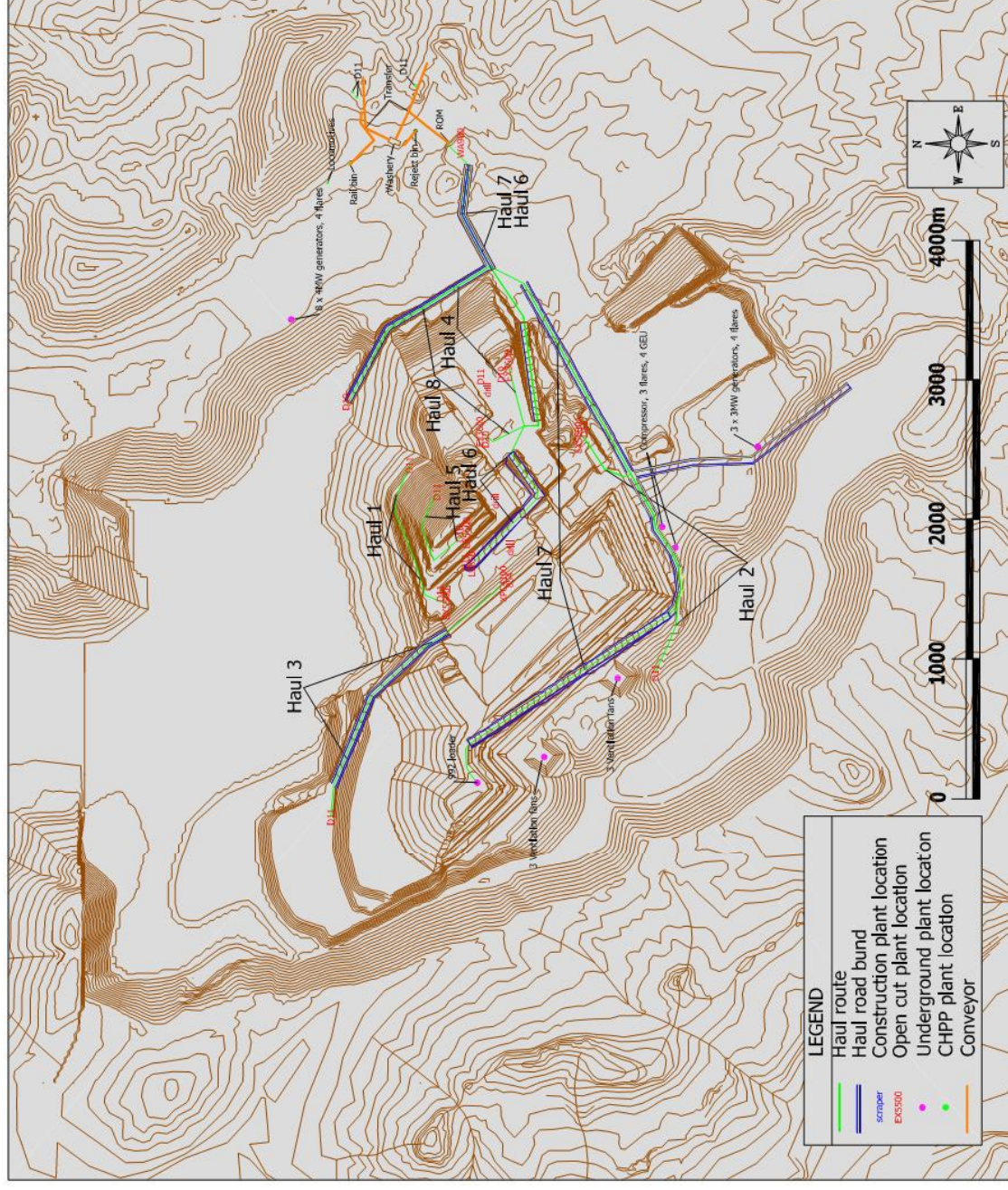
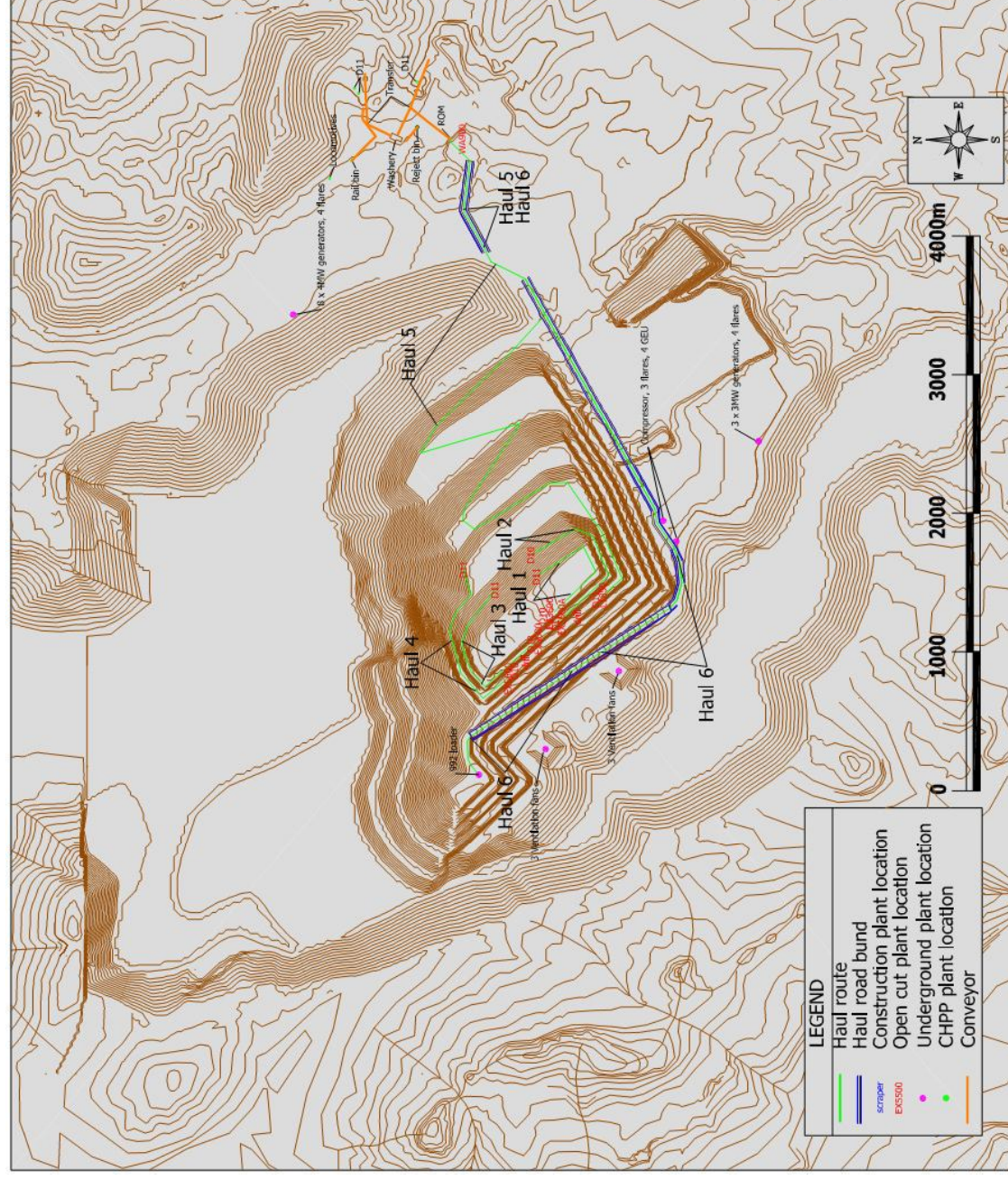


Figure C.8 Source and Bund Locations, Year 13 Evening/Night Scenario



APPENDIX

D. NOISE CONTOURS

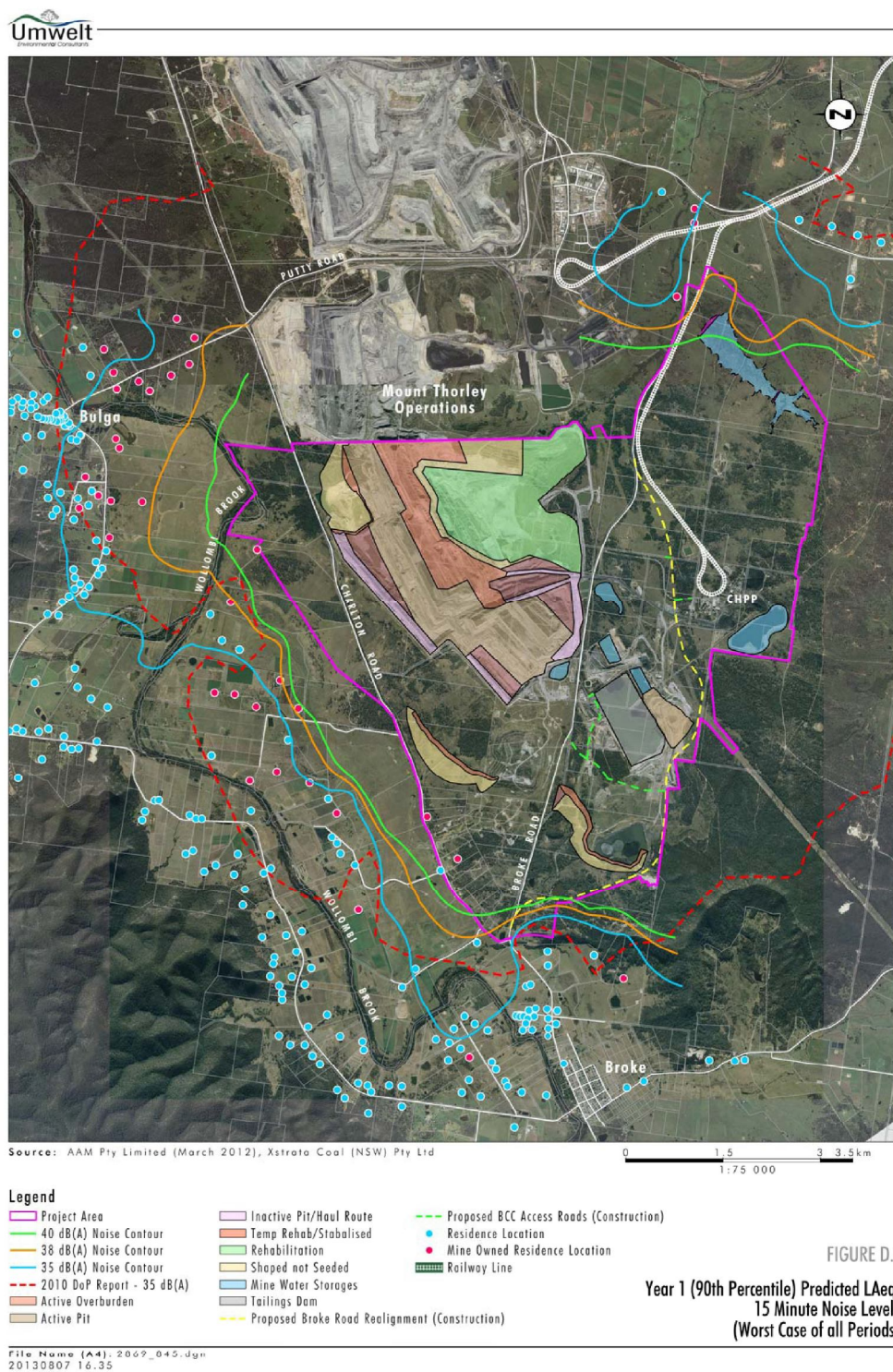


Figure D.1 Indicative 90th Percentile Noise Contours, Year 1

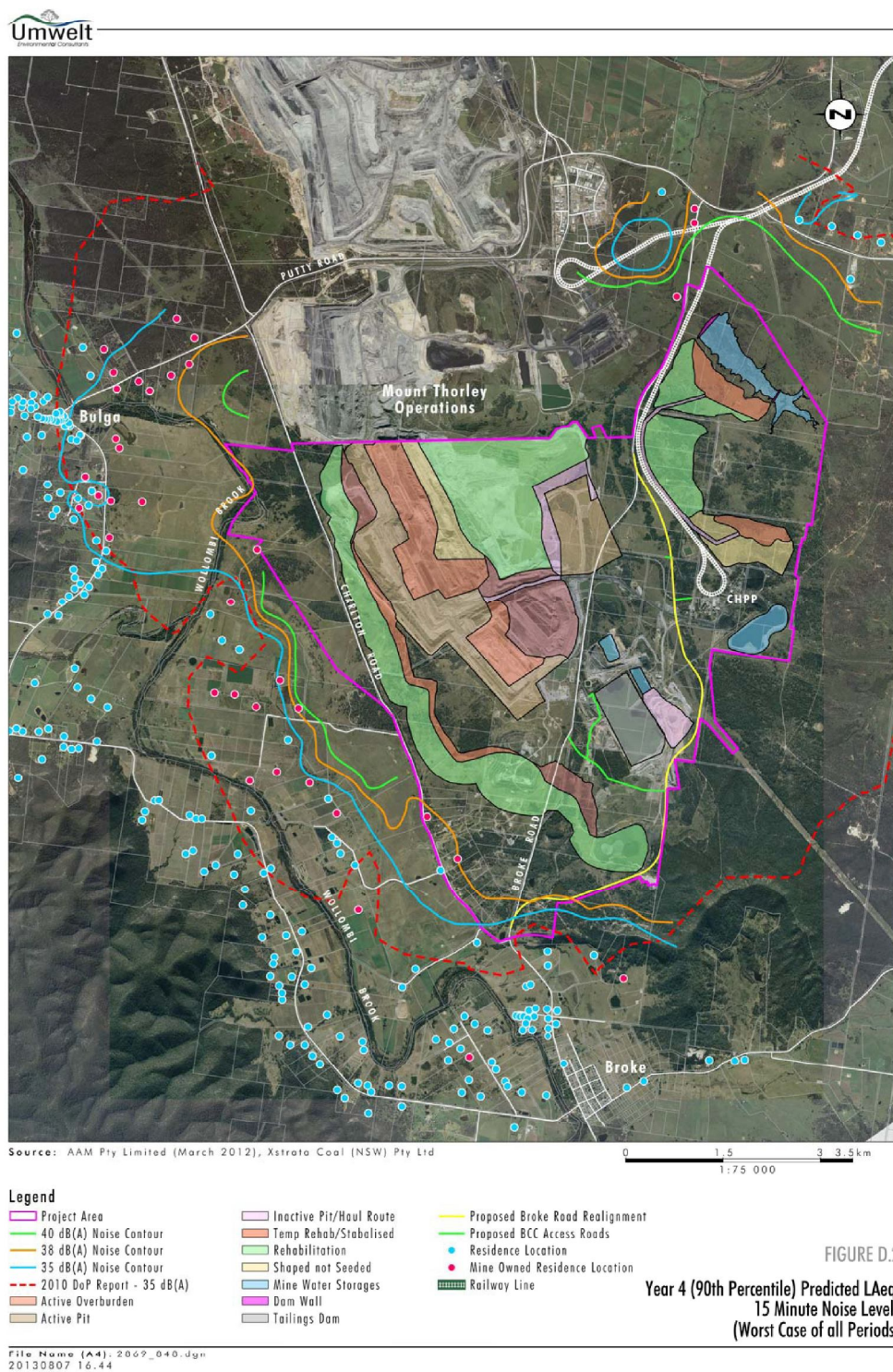


Figure D.2 Indicative 90th Percentile Noise Contours, Year 4

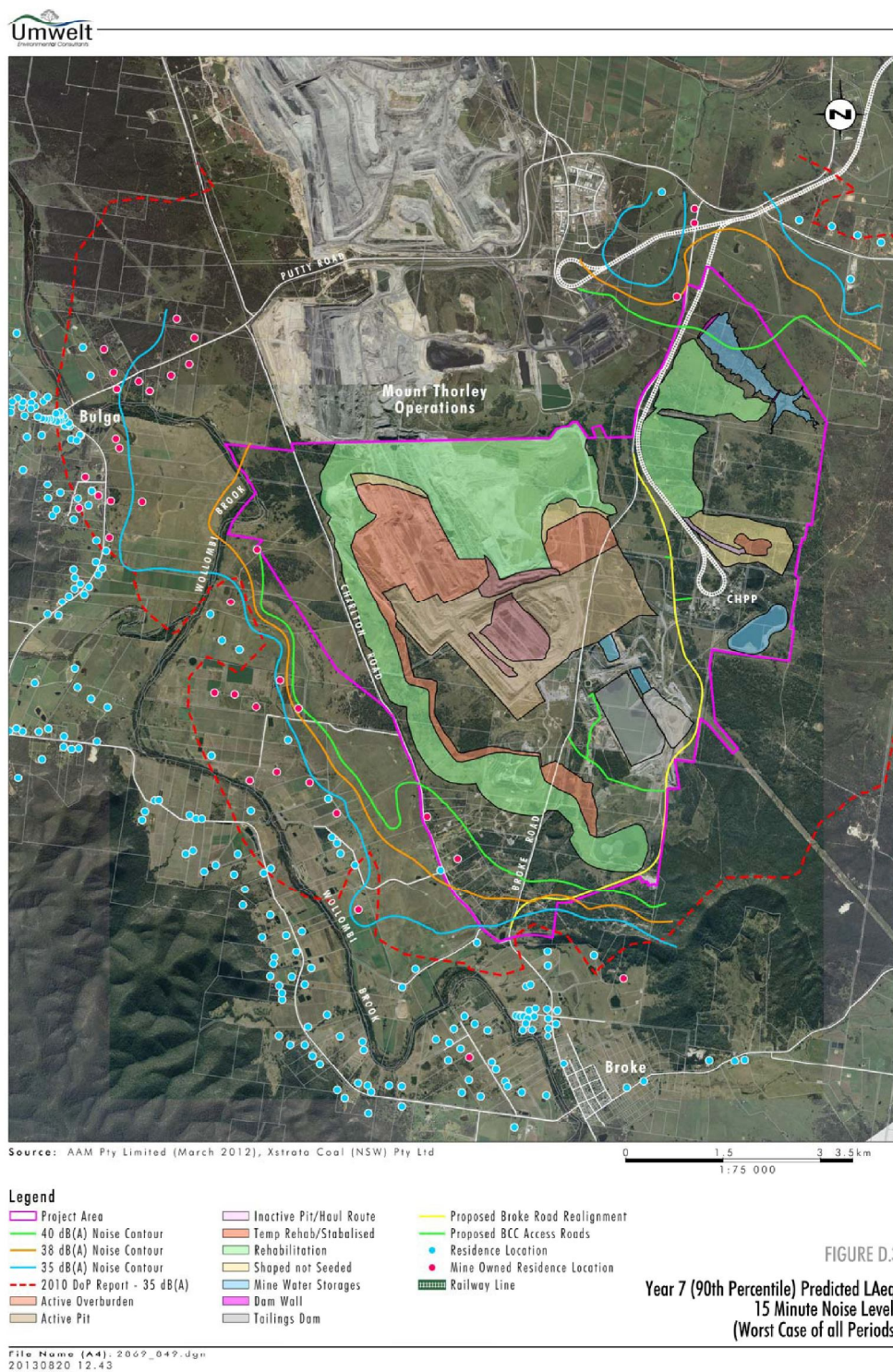


Figure D.3 Indicative 90th Percentile Noise Contours, Year 7

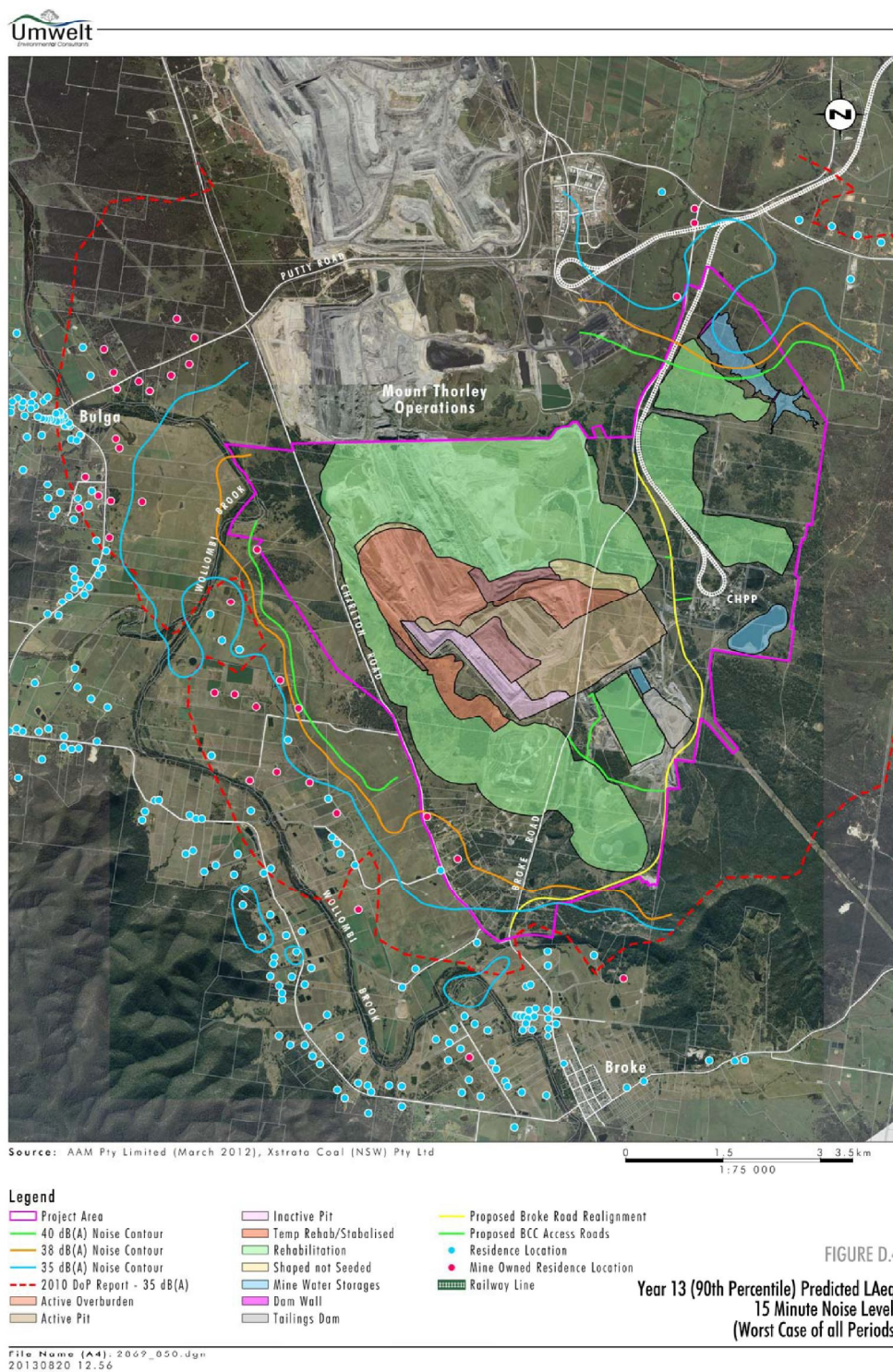


Figure D.4 Indicative 90th Percentile Noise Contours, Year 13

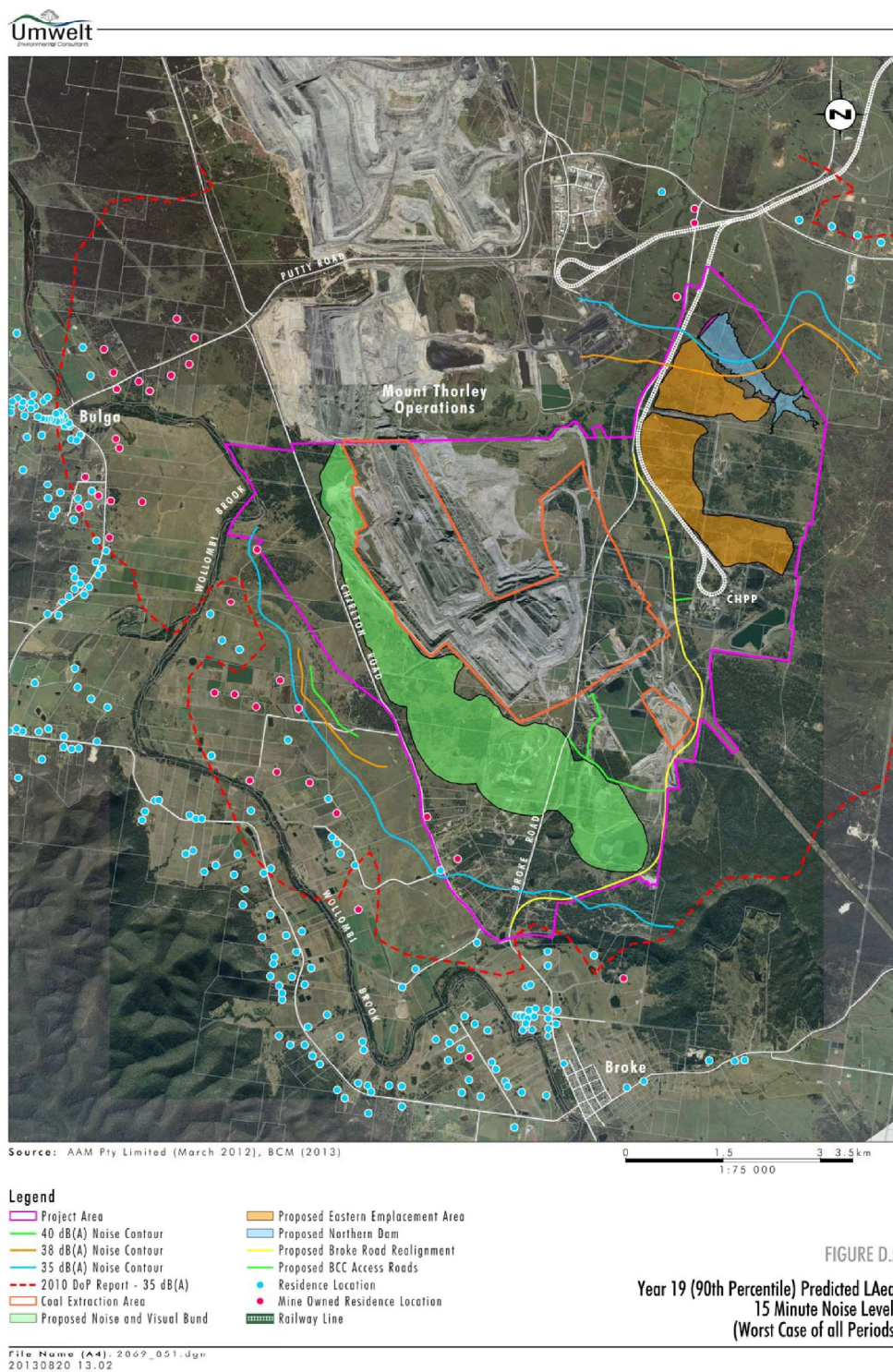


Figure D.5 Indicative 90th Percentile Noise Contours, Year 19