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Attention: Ms Tegan Cole

26 July 2021

EPA Advice on Submissions Report

Dear Ms Cole

Thank you for the request for advice from Public Authority Consultation (PAE-13876507), requesting the review by the NSW Environment Protection Authority (EPA) of the Submissions Report for the proposed Mount Pleasant Optimisation Project (Application SSD 10418), located 3 kilometres north west of Muswellbrook in the Upper Hunter Valley of New South Wales.

The EPA has reviewed the following documents:

- Mount Pleasant Optimisation Project Submissions Report – prepared by Resource Strategies for Mach Energy (the Submissions Report)

The EPA understands the proposal is for the extraction of additional coal reserves within the Mount Pleasant Mining Leases and an increase in the rate of coal extraction, handling and processing of ROM coal up to 21 Mtpa (i.e. progressive increase in ROM coal mining from 10.5 Mtpa over the Project life).

Based on the information provided, the proposal is subject to an Environment Protection Licence (EPL) under the *Protection of the Environment Operations Act 1997* (POEO Act) for Mining for coal, clause 28 of Schedule 1 of the POEO Act.

The EPA has reviewed the Submissions Report and notes it has addressed the EPA's submission on this project from 17 March 2021. However, the EPA has the following additional comments and recommendations:

1. Matters to be addressed prior to determination

a. Air Quality - Modelled mitigation measures

The EPA recommends that the Proponent identifies the specific triggers and specific actions that are modelled, and therefore proposed to be used to manage particulate emissions and impacts at the affected receptors, both for Muswellbrook and isolated receptors, to demonstrate they will be able to manage the particulate emission and impacts.

The EPA considers that the use of visible dust as a management method to be subjective and as originally requested, requires the proponent to provide the specific meteorological and monitoring triggers used to apply the reactive measures. The information provided is

not transparent enough to determine that the reactive management measures have been robustly determined and how they will be implemented.

Prior to recommending conditions of approval, the EPA recommends that the proponent address the above outstanding issue.

Further details of the EPA's review of the air quality issues addressed in the Submissions Report is at **Attachment A.**

2. Matters to be addressed with conditions

a. Wastewater discharges and water extraction

*The recommended conditions of approval in **Attachment B** aim to ensure that wastewater discharges and water extraction are minimised and are appropriately assessed and managed.*

The Submissions Report commits to significantly increasing on-site water recycling. However, neither reduced extraction or minimised discharges are considered in the Submissions Report, even though they have potential to reduce the water pollution risk at the site. A condition of approval is recommended to revise the site water balance with the aim of minimising licensed extraction from the Hunter River and reducing discharges under the HRSTS.

The Submission Report does not include an appropriate water pollution impact assessment regarding discharges from the site. Conditions of approval are recommended if discharges are proposed following preparation of the revised site water balance, which would require a water pollution impact assessment to be prepared and changes to the monitoring program.

Further details of the EPA's review of the surface water issues raised in the Submissions Report are at **Attachment B.**

b. Noise Impact Assessment

*The EPA has provided recommended premises-based noise limits and conditions in **Attachment C**.*

Attachment C also considers the Proponents responses to the issues raised by the EPA in the Submissions Report.

3. Minor matters

a. Air quality – Receptors subject to acquisition rights – PM_{10} incremental exceedances

The EPA recommends that the Department of Planning, Industry and Environment (DPIE) request further information from the Proponent to clarify if there are additional receptors that will have acquisition rights under the proposal.

Further details are provided in **Attachment A**.

If you have any questions about this matter please contact Karen Gallagher on 02 49086822 or via email at RegOps.MetroRegulation@epa.nsw.gov.au.

Yours sincerely

MEGAN WHELAN
Manager Regulatory Operations

Attachment A – Air Quality Impact Assessment

Modelled mitigation measures not described

The EPA recommended the Air Quality Impact Assessment (AQIA) includes details of how the reactive measures were modelled, including, but not limited to:

a) What specific activities were and were not included in the model,
b) What meteorological conditions were used and what number of hours/days this was applied to,
c) What monitoring data was used and what number of hours/days this was applied to,
d) Adequate justification of which receptors would be reasonably affected by the reactive measures undertaken,
e) What meteorological and PM_{10} conditions in addition to the current licence conditions are required to mitigate the additional exceedances (for all receptors that have additional exceedances),
f) Details and evidence of the historic use of the proactive and reactive measures in mitigating dust impacts

Proponent Response

The Submissions Report has states that the modelling of the predictive/reactive measures involved stopping the activities that can be readily controlled in the pit and overburden while the emissions from wind erosion in the exposed pit and overburden areas and the CHPP activities remained. The Submissions Report also includes the results of additional modelling which is based on environmental dust management from EPL conditions (Muswellbrook NW monitor PM_{10} concentration and wind directions) and other conditions contained within Air Quality Management Plan (AQMP) (incorporating monitors APF2, APF4 and APF5 and associated triggers). This modelling was done on an hourly basis and included a 1-hour reaction delay for ceasing of the applicable activities. The adverse conditions were identified when the rolling 1-hour average wind directions were within the angles specified for each monitor, combined with the rolling 24-hour average dust concentration above the applicable trigger level.

Excluding days where background concentrations already exceed criteria and extreme dust event days, the model predicts no additional exceedances of the 24-hour PM_{10} criteria, with the exception of receptors to the north in Scenario 5 (represented by receptor 169). The Submissions Report claims this would not happen in reality as the existing monitor (APF4) would be moved or another monitor added and the existing trigger of 50 $\mu g/m^3$ would avoid additional exceedance days. The Submissions Report has provided some of the analysis to articulate how the reactive measures as modelled achieve compliance with the PM_{10} criteria (for receptor 112 representing Muswellbrook).

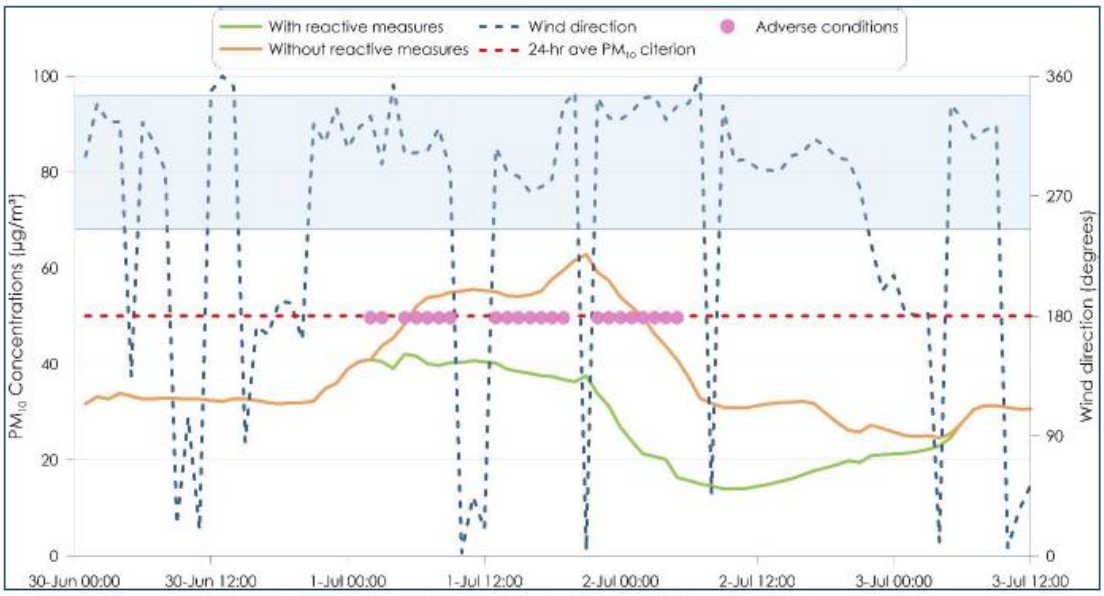

Figure 2: Timeseries graph showing effect of implementation of reactive measures

The Submissions Report states that the same analysis was conducted for $PM_{2.5}$, although using different background data to account for the increased $PM_{2.5}$ concentrations in Muswellbrook from wood heaters. The Submissions Report concludes that the additional analysis of $PM_{2.5}$ indicated that the results presented in the EIS of no additional exceedances of the 24-hour $PM_{2.5}$ criteria would be achievable with the current triggers in the EPL and AQMP.

The Submissions Report states that as the receptors identified in the AQIA for assessment are the closest and most likely impacted, the predicted particulate concentrations further afield would experience less emissions from the project but still benefit from the application of the reactive measures. The additional analysis of receptor 783 at the edge of Muswellbrook is predicted to have no additional exceedances even without the application of reactive measures.

The Submissions Report outlines that in 2020, operations were ceased for 617 hours due to the generation of visible dust and 86 hours in accordance with the conditions in the EPL.

EPA comment

The current specific triggers from the Air Quality Management Plan for reactive dust management, including wind direction and PM_{10} concentration, modelled in the additional analysis indicate that generally they are effective in reducing dust levels to below the 24-hour PM_{10} criterion. However, the details of those triggers are not provided in the Submissions Report. The Submissions Report also states that outside the EPL conditions, MACH only implements equipment shutdowns in response to visible dust, which is subjective.

Further, there is no clarity in the Submissions Report around what was modelled and therefore what the actual trigger levels (PM_{10} concentration and wind direction) and actions (activities shutdown). This is in part due to the contradictory information provided. For example, Figure 2 of the timeseries of the effect of the reactive measures at receptor 112 appears to be applied prior to the PM_{10} concentration reaching 44 µg/m^3 (the stop work trigger contained in the EPL). This implies that an alternative trigger has been represented in the modelling, which may be the additional triggers in the AQMP. However, these additional triggers and management responses have not been included or described.

Further, the Submissions Report states the pink spots in Figure 2 indicate the hours in which the adverse triggers activate at the 50 µg/m^3 level. This implies that an additional reactive management trigger has been considered and represented in the additional modelling. As receptor 112 is closest to the Muswellbrook NW monitor, the EPL condition applies (44 µg/m^3 at

Muswellbrook NW monitor). If a lower trigger concentration at Muswellbrook NW is required to effectively manage impacts at Muswellbrook, the proponent should clearly identify this.

The EPA considers that the use of visible dust as a management method to be subjective and, as originally requested, requires the proponent to provide the specific meteorological and monitoring triggers used to apply the reactive measures. The information provided is not transparent enough to determine that the reactive management measures have been robustly determined and how they will be implemented.

EPA recommendation: Not adequately addressed.

The EPA recommends that the proponent identifies the specific triggers and specific actions that are modelled and therefore proposed to be used to manage particulate emissions and impacts at the affected receptors, both for Muswellbrook and isolated receptors, to demonstrate they will be able to manage the particulate emissions and impacts.

Incomplete assessment of particulate impacts

The EPA recommended the proponent present a more detailed assessment of 24-hour cumulative impacts for the privately owned receptors, inclusive of receptors in Muswellbrook and isolated rural receptors, that are not subject to acquisition rights.

Proponent Response

The Submissions Report has included an additional five receptors (86a, 86b,169,225,783), not subject to acquisition rights, in the assessment of cumulative 24-hour impacts.

The contemporaneous assessment of 24-hour impacts predict up to 7 exceedances for $PM_{2.5}$ and four exceedances of PM_{10}. Modelling of proactive/reactive measures (see Issue 1) resulted in no additional exceedances. The top predicted impacts from background and from incremental for each of the additional receptors is included in Appendix A of the Submissions Report Attachment B

EPA recommendation: Adequately addressed.

Inadequate discussion of background air quality data used

a) Annual

The EPA recommended the proponent:

- Clarifies the methodology used to model the past mining activities, and that the methodology (emission estimation and model setup) is the same as that used to model the impacts from the proposal. Where there are differences in the methodology, the AQIA must robustly justify those differences and account for any implications on the final assessment results and conclusions,
- Clarifies and justifies the activity rate used to model past mining activities and discussion that the non-modelled background is representative,
- Provides the details of all monitoring stations and particulate concentration data used to compare the modelled concentrations against.

Proponent Response

The Submissions Report states the methodology to model past mining impacts is similar to that used to predict the impacts from the proposal and the same approach as a previous assessment. The Submissions Report clarifies that for all mines modelled as part of the background (Bengalla, Mt Arthur, Mangoola, Muswellbrook and Drayton), the actual operations reported in the Annual

Reviews were used. The Submissions Report provides a comparison (Table 5) between the measured PM_{10} and TSP concentrations and the model predictions of all the other mines for each monitor in the area and provides the calculated residual used for the spatially variable annual background concentrations used in the assessment.

EPA recommendation: Adequately addressed.

b) 24-hour

The EPA recommended the proponent clarifies which monitor was used to assess 24-hour cumulative impacts for each receptor and that all receptors have representative background concentrations.

Proponent Response

The Submissions Report includes Figure 4 which clarifies which receptors were ascribed to each monitor for background 24-hour concentrations. The background data used for the assessment was for 2015 when the project was not operating.

EPA recommendation: Adequately addressed.

Receptors subject to acquisition rights - PM10 incremental exceedances

The EPA recommended that the AQIA clearly identify all the receptors that already have or as a result of this project will have acquisition rights.

Proponent Response

The Submissions Report has provided a table that outlines the receptors that already have acquisition rights:

Table 2: Land subject to acquisition upon request

Basis	Receiver
Noise	23, 45, 47, 67, 96, 102, 108, 112, 118, 120, 120c, 121, 136, 143a, 143b, 143c, 143d, 143e, 147, 153a, 153b, 156a, 157a, 158, 159, 447, 448, 449
Noise & Air	43, 43b
Air	20, 21

The Submissions Report clarifies that receptor 154/154b does not have acquisition rights, only mitigation rights for noise impacts.

EPA comment

The Submissions Report has provided the receptors that have acquisition rights from the approved operations, not from the proposed operations.

EPA advice: It is not explicitly clear if there are additional receptors that will have acquisition rights under the proposal. DPIE should consider requesting further clarity from the proponent.

Attachment B – Surface Water Assessment

Water balance minimising water extraction and discharge

The EPA requested revision of the water balance to optimally use all available storages to eliminate or minimise discharges. Consideration of minimising water drawn from the Hunter River using WALs was also requested. The *Submissions Report* does not provide a revised water balance and does not seek to minimise water drawn from the Hunter River or reduce discharges under the HRSTS.

While the information was not provided as requested, the residual risk is considered low as the proponent committed to a significant increase in available reuse water, which, in conjunction with the potential to reduce the volume of water drawn from the Hunter River, should lead to reduced discharges.

The following condition of approval is recommended to revise the site water balance with the aim of minimising licensed extraction from the Hunter River and reducing discharges under the HRSTS:

EPA recommendation:

A site water balance must be developed that:

- ***maximises water recycling and reuse***
- ***minimises water drawn from the Hunter River using WALS***
- ***reduces or eliminates discharges to the Hunter River under the HRSTS***

Assessment of discharges

The EPA requested a more comprehensive set of pollutant data for all storages and discharges before the water quality impacts of the proposal could be assessed. The EPA also identified that the Surface Water Assessment that was presented in the EIS was not consistent with the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZG2018) and requested a revised assessment if discharges were proposed. The *Submissions Report* does not provide a revised assessment even though discharges are proposed.

If, following preparation of the revised water balance, discharges cannot be avoided a water pollution impact assessment would be required to inform licensing considerations consistent with Section 45 of the *Protection of Environment Operations Act 1997.*

The following condition of approval is recommended to address these issues if discharges are required following a revised water balance.

EPA recommendation:

If discharges are proposed, a water pollution impact assessment will be required to inform licensing consistent with section 45 of the POEO Act. Any such assessment must:

- ***be prepared in consultation with the EPA, with a level of detail commensurate with the potential water pollution risk***
- ***demonstrate that all practical and reasonable measures to avoid or minimise water pollution and protect human health and the environment from harm are investigated and implemented***
- ***estimate the frequency and volume of the proposed discharges***

- ***characterise the expected quality of the proposed discharges using a comprehensive set of data, under typical and worst-case conditions, in terms of the concentrations and loads of all pollutants present at levels that pose a risk of non-trivial harm to human health or the environment***
- ***assess the potential impact of the proposed discharges on the environmental values of the receiving waterway, including for typical through to worst-case scenarios, with reference to relevant guideline values consistent with the National Water Quality Guidelines***
- ***where a mixing zone is required, demonstrate how the guideline values for relevant chemical and non-chemical parameters will be met at the edge of the initial mixing zone of the discharge***
- ***demonstrate that the proposal will be designed and operated to***
    - ***protect the Water Quality Objectives for receiving waters where they are currently being achieved***
    - ***contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved***
- ***where relevant, identify measures to mitigate impacts.***

Monitoring

The EPA identified that the pollutants proposed for ongoing monitoring should be revised to include a full range of appropriate pollutants, particularly for the controlled discharge to the Hunter River. This was to be completed once the water quality impact assessment was revised. A revised assessment was not included in the *Submissions Report* and a full range of pollutants was not identified.

Monitoring a full range of pollutants will assist in addressing residual pollution risks at the site. It is considered that standard management and mitigation measures can be developed if any non-trivial impacts are identified.

The following condition of approval is recommended to establish a monitoring program to address any residual water pollution risks.

EPA recommendation:

An ongoing water quality monitoring program must:

- ***include a full range of pollutants at non-trivial levels identified through a comprehensive set of sampling data for each monitoring location***
- ***identify monitoring locations and the frequency of sampling for surface water sites that enables any non-trivial impacts on receiving waters to be identified and inform appropriate management responses.***

Attachment C - Noise Impact Assessment

EPA Issue	Submissions Report	EPA Position
Meteorological Conditions: The EPA proposes that day, evening and night noise limits will be required to be met under adverse meteorological conditions as set out in the NSW Noise Policy for Industry (NPfI - EPA, 2017a) NPfI and that the proponent be invited to comment. **Intrusive noise limit:** That NPfI transitional arrangements would require consideration of a lower daytime limit than proposed under the actual NPfI.	**Meteorological Conditions:** The EPA's endorsement of the meteorological conditions modelled is noted. MACH expects any Development Consent or EPL for the Project would specify noise criteria developed consistent with the methodology described in the NPfI. It is understood the alternative conceptual approach described by the EPA's submission is not consistent with the NPfI, which specifies application of the meteorological conditions used in the environmental assessment process. **Intrusive noise limit:** As noted in the response to the EPA's comments regarding the metrological conditions modelled, MACH expects any Development Consent or EPL for the Project would include noise criteria developed consistent with the methodology described in the NPfI.	The EPA advises that noise limits have been recommended for premises-based activities based on information supplied in the EIS / NIA and in accordance with the principals of the NPfI.
NPfI Annoying noise characteristics: The EPA sought additional information about how the EIS / NIA addressed annoying noise characteristics within the meaning of the Noise Policy for Industry.	Given tonality and intermittency are unlikely to be relevant for large-scale mining operations, as highlighted by the EPA, noise assessments for such operations typically focus on the potential for dominant low-frequency noise, which is relevant for some operations. RWDI Australia (RWDI) (formerly Wilkinson Murray) has provided some additional discussion of tonality and intermittency in the context	That EPA concurs on the basis of the circumstances of this project (i.e. a non-precedent setting position).

	of the Project's noise emissions in Attachment C.	
Voluntary Land Acquisition and Mitigation Policy (VLAMP): The EPA raised concerns that properties 35 and 35b should be afforded 'voluntary mitigation rights' under VLAMP.	The discrepancy correctly noted by the EPA is a typographical error in the paragraph preceding Table 6-12 of the Project Noise and Blasting Assessment (Appendix A of the EIS), which summarises the noise results in that table. However, Table 6-12 in the Project Noise and Blasting Assessment and the corresponding summary in Section 7 of the main text of the EIS do indicate these receivers are predicted to experience 'moderate' exceedances of the applicable assessment criteria, and are not currently subject to acquisition or mitigation rights under Development Consent DA 92/97.	That EPA accepts the response.
Rail Noise Assessment: • Whether receivers were identified and considered for the section of network line between Muswellbrook Junction to Anteine Rail spur; and, • Clarification of the impacts on the section of network line between Mt Pleasant Operations Rail Spur to Muswellbrook Junction.	• RWDI identified approximately 30 noise-sensitive receivers within the offset distances described in the Project Noise and Blasting Assessment (Appendix A of the EIS) for the section of the Main Northern Railway between Muswellbrook Junction and the Antiene Rail Spur junction. These receivers were not discussed in the Project Noise and Blasting Assessment as cumulative noise levels along the Main Northern Railway are expected to decrease over time due to progressive reductions in the approved coal production rates in the Hunter Valley. • RWDI (2021) has confirmed the predicted noise levels were transcribed incorrectly into the Project Noise and Blasting Assessment, and thus the predicted noise levels at the four receivers within 83 m of the Muswellbrook-Ulan Rail Line were overstated. The corrected (reduced) predicted rail noise levels are provided in Attachment C.	The clarification provided in the RtS is acceptable and identifies that cumulative rail noise impacts were in fact over predicted in the SSD NIA. The text below summarises the EPA's position on the rail noise assessment. **Non-network (Stage 2 rail spur sections):** The assessment identified two (2) receivers that may experience an up to 2dB exceedance of the Rail Infrastructure Noise Guideline (RING) trigger levels i.e. receivers 20 and 21. Both receivers are currently subject to voluntary acquisition / mitigation upon request and therefore no further assessment is necessary. **Project related impacts on network lines:** The assessment has identified that based on proposed average rail movements (i.e. up to 6.5 train despatches in a 24hr period), rail noise levels on the relevant network lines will not increase by greater than 2dB as a consequence of MPO movements.

		NOTE: This assessment considers all movements from MPO and not just the increase sought by the SSD proposal and is therefore considered conservative.

Additional advice:

- The existing consent (DA 92/97) notes thirty (30) receivers with acquisition upon request rights and twenty (20) receivers with mitigation upon request rights (Schedule 3, Conditions 1 and 2). **The EPA assumes these rights will be carried over into any SSD approval.** The EIS identifies a further two (2) receivers that will qualify for voluntary acquisition rights and two (2) for voluntary mitigation rights pursuant to Government Voluntary Land Acquisition and Mitigation Policy (VLAMP). **Any noise limits recommended by EPA will not include receivers where predicted impacts in the SSD NIA would qualify for voluntary acquisition rights.** However, it is noted that some receivers who have voluntary acquisition / mitigation under the existing consent would not qualify on the basis of the predictions in the SSD NIA and hence are included in the noise limit recommendations.
- The current EPL identifies receiver locations where limits apply, however it also identifies monitoring points and associated limits for the purposes of monitoring and compliance assessment. These locations and corresponding limits will need to be negotiated with the licensee at a future time if the SSD is approved and will require further information from the licensee.
- Construction associated with the optimisation process within the mining lease area has been determined to meet the operational criteria. However, construction of the Northern Link Road will be off the ML premises and will not be subject to the EPL. **This aspect of the proposal should be managed via the Planning Approval.**

Recommended draft Premises-based noise conditions

Noise Limit Conditions

L6.1 Noise generated at the premises must not exceed the noise limits at the times and locations in the table below. The locations referred to in the table below are identified *in "Mount Pleasant Optimisation Project – Environmental Impacts Statement, Appendix A – Noise and Blasting Assessment (Report No. 15402-H, December 2020)"*; EPA Document No. DOC21/60346-27

Location	Noise Limits in dB(A)			
	Day	Evening	Night	Night[1]
	$L_{Aeq(15\ minute)}$	$L_{Aeq(15\ minute)}$	$L_{Aeq(15\ minute)}$	L_{AFmax}
19, 77, 79, 84a, 140c, 169, 171, 172, 172b, 172c, 181c, 189, 190, 191, 192, 193, 202, 203, 203b, 203c, 207, 213, 214, 215, 216, 216b, 217, 218, 219, 220, 221, 222, 223, 223b, 224, 225, 289, 526, 667a, 667b, 667c, 667d, 667e	40	37	37	45
20, 21, 35, 35b, 67, 74, 86a	40	38	38	45
43, 43b, 96	40	39	39	45
47, 102, 108, 140a	40	40	40	45
82, 83, 86b, 112, 310, 180b, 194, 195, 197, 202b, 212, 212b, 547	40	36	36	45
All other residential receivers not identified in this table in NAG 1	40	36	36	45
All other residential receivers not identified in this table	40	35	35	45

1. LAFmax,dB noise levels do not apply at premises that have voluntary acquisition or mitigation rights under SSD10418

L6.2 For the purposes of condition L6.1:

a) Day means the period from 7am to 6pm Monday to Saturday and the period from 8am to 6pm Sunday and public holidays.

b) Evening means the period from 6pm to 10pm.

c) Night means the period from 10pm to 7am Monday to Saturday and the period from 10pm to 8am Sunday and public holidays.

L6.3 Noise-enhancing meteorological conditions

a) The noise limits set out in condition L6.1 apply under the following meteorological conditions:

Assessment Period	Meteorological Conditions

Day	Stability Categories A, B, C and D with wind speeds up to and including 3m/s at 10m above ground level.
Evening	Stability Categories A, B, C and D with wind speeds up to and including 3m/s at 10m above ground level.
Night	Stability Categories A, B, C and D with wind speeds up to and including 3m/s at 10m above ground level; or Stability category E and F with wind speeds up to and including 2m/s at 10m above ground level.

b) For those meteorological conditions not referred to in condition L6.3(a), the noise limits that apply are the noise limits in condition L6.1 plus 5dB.

L6.4 For the purposes of condition L6.3:

a) The meteorological conditions are to be determined from meteorological data obtained from the meteorological weather station identified as Mount Pleasant Operation M-WM2 Automatic Weather Station **EPA monitoring point XX.**

b) Stability category shall be determined using the following method from Fact Sheet D of the *Noise Policy for Industry* (NSW EPA, 2017):

i. Use of sigma-theta data (section D1.4).

L6.5 To assess compliance:

a) with the $L_{Aeq(15\ minutes)}$ or the L_{Amax} noise limits in condition L6.1 and L6.3, the noise measurement equipment must be located:

(i) approximately on the property boundary, where any residence is situated 30 metres or less from the property boundary closest to premises; or where applicable,

(ii) in an area within 30 metres of a residence façade, but not closer than 3 metres where any residence on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable,

(iii) in an area within 50 metres of the boundary of a National Park or Nature Reserve,

(iv) at any other location identified in condition L6.1

b) with the $L_{Aeq(15\ minutes)}$ or the L_{Amax} noise limits in condition L6.1 and L6.3, the noise measurement equipment must be located:

(i) at the reasonably most affected point at a location where there is no residence at the location; or,

(ii) at the reasonably most affected point within an area at a location prescribed by condition L6.5 (a).

L6.6 A non-compliance with conditions L6.1 and L6.3 will still occur where noise generated from the premises is measured in excess of the noise limit at a point other than the reasonably most affected point at the locations referred to in condition L6.5 (a) or L6.5 (b).

NOTE to L6.5 and L6.6: The reasonably most affected point is a point at a location or within an area at a location experiencing or expected to experience the highest sound pressure level from the premises.

L6.7 For the purpose of determining the noise generated from the premises, the modifying factor corrections in Table C1 in Fact Sheet C of the *Noise Policy for Industry* (NSW EPA, 2017) should be applied, if appropriate, to the noise measurements by the noise monitoring equipment.

L6.8 Noise measurements must not be undertaken where rain or wind speed at microphone level will affect the acquisition of valid measurements.

Blasting

L7 Blasting Limits

L7.1 The airblast overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L7.2 The airblast overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L7.3 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L7.4 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L7.5 The airblast overpressure and ground vibration levels in conditions L7.1 to L7.4 do not apply at noise sensitive locations that are owned by the licensee or subject to a private agreement, relating to airblast overpressure and ground vibration levels, between the licensee and land owner.

L7.6 Blasting in or on the premises must only be carried out between 0900 hours and 1700 hours, Monday to Saturday. Blasting in or on the premises must not take place on Sundays or Public Holidays without the prior approval of the EPA.

Monitoring Conditions

The monitoring and reporting requirements in EPL 20850 will need to be modified, in consultation with the licensee, to determine the need for revised noise and blast monitoring points; weather monitoring points and frequency and type of monitoring.