



24 June 2022

303, 74 Pitt Street  
Sydney, NSW 2000

Attention: Debbie Fransen  
AT&L

**200 Aldington Road Industrial Estate (SSD-10479)–Request  
for Additional information Department Planning, Industry &  
Environment - Acoustic Response to Noise Impact  
Assessment**

This letter details the review and response to the items included in the Department of Planning, Industry & Environment's request for additional information included in their letter *200 Aldington Road Industrial Estate (SSD-10479) Request for additional information* with reference *SSd-10479 RTS 3\_DPE Comments*.

The response from the DPE includes the comments regarding the *Noise and Vibration Impact Assessment (NVIA) R6* included as part of the application for proposed development dated 8<sup>th</sup> December, 2021.

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The DPE comments regarding acoustics include the following.

#### Noise

- Clause 4.3.1(5) Noise and Vibration of MRP DCP states: *'Acoustic Reports for individual developments must assess cumulative noise impacts, including likely future noise emissions from the development and operation of the Precinct. The consultant should liaise with the relevant consent authority to determine acceptable amenity goals for individual industrial developments and background noise levels.'* In response to Clause 4.3.1(5) of the MRP DCP, the Department requires that all developable industrial zoned land within the Mamre Road Precinct and any existing / approved industrial sites near the precinct must be considered when using section 2.4.2 of the *Noise Policy for Industry* to derive project amenity noise levels. The night-time project amenity noise level for rural-residential areas outside the Precinct in Mount Vernon, Horsley Park, Kemps Creek and Luddenham should be no more than 27 dBA.
- Existing residential land uses within the Mamre Road Precinct affected by noise from the proposed development must be afforded rural zoning for noise assessment purposes. Existing dwellings on properties that do not currently have a development application lodged must be assessed as a rural residential receiver with existing land use rights and cannot be assumed to be uninhabited without clear justification. Where construction or operational noise exceeds the criteria and there is no active development application on the site, negotiated agreements with each individual should be considered. As such, you are encouraged to engage with the owners/occupants of any such affected dwellings to seek negotiated agreements on noise mitigation/compensation commensurate to the anticipated noise impacts. Outcomes of stakeholder engagement should be provided in a response to facilitate the Department's assessment in relation to noise impact.
- The NVIA must provide an analysis of metrological data to determine the frequency of noise-enhancing conditions (temperature inversions and winds) which need to be included in the NVIA. Otherwise, noise modelling is to be undertaken under worst-case sound propagation conditions in line with Fact Sheet D of the NPfI.
- Correct the reference to an 'external play area' in Section 6.3 of the NVIA.
- Modelled line sources should indicate the areas where heavy vehicles require greater engine capacity.
- To ensure the NVIA has captured the worst-case emission scenario, it should include a sensitivity analysis of the likely noise emissions from the range of anticipated tenants and industries. Contingency factors adopted must be identified to compensate for information gaps, or reasons for not incorporating contingency factors provided.
- Provide further justification as to why the maximum noise level assessment is based only on noise generated by Lot M, with regard to the location of other residential receivers and concurrent operation of warehouses on the other lots.
- The NVIA is to be updated to address all controls of the MRP DCP (Section 4.3.1 Noise and Vibration). Feasible and reasonable acoustic design measures and noise attenuated equipment should be incorporated into the development (refer to Table 3.1 of the Noise Policy for Industry).

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- The NVIA should consider vibration impacts from construction activities on nearby structures on surrounding properties, particularly those close to the site boundary.
  - The NVIA should clearly outline how road noise levels from additional traffic was evaluated and should assess the change in vehicle types on the road network, including evaluation of the potential road traffic noise impact associated with the use of 26m B-doubles and 30m A-doubles and the acceleration profiles of the different heavy vehicles generated by the development.
  - The NVIA should include the details and analysis of the effectiveness of proposed management and mitigation measures to adequately manage identified impacts, including a clear identification of residual noise and vibration following application of mitigation these measures and details of any proposed compliance monitoring programs.

The acoustic items are raised within the DPE's correspondence are detailed below:

1. Cumulative impacts to precincts of Mount Vernon, Horsley Park, Kemps Creek and Luddenham –

- Clause 4.3.1(5) Noise and Vibration of MRP DCP states: '*Acoustic Reports for individual developments must assess cumulative noise impacts, including likely future noise emissions from the development and operation of the Precinct. The consultant should liaise with the relevant consent authority to determine acceptable amenity goals for individual industrial developments and background noise levels.*' In response to Clause 4.3.1(5) of the MRP DCP, the Department requires that all developable industrial zoned land within the Mamre Road Precinct and any existing / approved industrial sites near the precinct must be considered when using section 2.4.2 of the *Noise Policy for Industry* to derive project amenity noise levels. The night-time project amenity noise level for rural-residential areas outside the Precinct in Mount Vernon, Horsley Park, Kemps Creek and Luddenham should be no more than 27 dBA.

The DPE has include comments that noise from the use of the site should be assessed to the rural-residential areas outside of the precinct including Mount Vernon, Horsley Park, Kemps Creek and Luddenham should be no more than 27 dB(A).

Based on the location of the external precincts to the Mamre Road Precinct including the definition of the precinct area included in the Mamre Road Precinct Development Control Plan 2021 an additional assessment of noise impacts to the surrounding areas has been undertaken in the *Noise Impact Assessment, Revision 7*.

An additional section has been included in the *Noise Impact Assessment* including Section 7 of Revision 7 of the acoustic assessment. The additional assessment includes noise modelling to the areas outside of the Mamre Road Precinct in accordance with the DPE requirement of 27 dBA.

2. Existing residential land uses within Mamre Road Precinct –

- Existing residential land uses within the Mamre Road Precinct affected by noise from the proposed development must be afforded rural zoning for noise assessment purposes. Existing dwellings on properties that do not currently have a development application lodged must be assessed as a rural residential receiver with existing land use rights and cannot be assumed to be uninhabited without clear justification. Where construction or operational noise exceeds the criteria and there is no active development application on the site, negotiated agreements with each individual should be considered. As such, you are encouraged to engage with the owners/occupants of any such affected dwellings to seek negotiated agreements on noise mitigation/compensation commensurate to the anticipated noise impacts. Outcomes of stakeholder engagement should be provided in a response to facilitate the Department's assessment in relation to noise impact.

As part of the noise *Nosie Impact Assessment, Revision 6* the assessment has included the use of the relevant noise emissions criteria in accordance with the surrounding receivers being designated as Rural. This is included in Section 2 of the report and included in the project trigger noise levels included in table 6 of the report.

Details of communications between the surrounding individual lot owners and the developers of the site is to be provided by others.

### 3. Meteorological conditions

- The NVIA must provide an analysis of meteorological data to determine the frequency of noise-enhancing conditions (temperature inversions and winds) which need to be included in the NVIA. Otherwise, noise modelling is to be undertaken under worst-case sound propagation conditions in line with Fact Sheet D of the NPfI.

The assessment of noise emissions from the operation of the site has included noise modelling, including an iNoise model, and includes the figures included within the *Noise Impact Assessment, Revision 6*. The modelling has included corrections for the potential meteorological conditions, including potential worst case propagation conditions which includes temperature inversions and wind speeds.

### 4. Correction of play area

- Correct the reference to an 'external play area' in Section 6.3 of the NVIA.

Correction to the item above has been undertaken in the revised *Noise Impact Report, Revision 7*.

### 5. Engine noise levels

- Modelled line sources should indicate the areas where heavy vehicles require greater engine capacity.

Noise levels used in the assessment of the site include maximum noise levels for the potential engine noise. That is the line source levels do not include a reduced noise levels of trucks in idle or coasting as they enter and exit the site.

The results of the noise emission assessment included in the *Noise Impact Assessment, Revision 6* includes the potentially worst case source noise levels resulting from truck movements on the site.

### 6. Expected warehouse uses

- To ensure the NVIA has captured the worst-case emission scenario, it should include a sensitivity analysis of the likely noise emissions from the range of anticipated tenants and industries. Contingency factors adopted must be identified to compensate for information gaps, or reasons for not incorporating contingency factors provided.

The assessment of the internal uses of the proposed warehouses includes a noise level of up to 95 dB(A), as detailed in Section 6 of the report. The noise level used in the report includes a level which is suitable for the assessment of expected uses of the warehouses including potential fabrication activities as well as the movement of materials and use of forklifts and the like.

The future use of the warehouse will be required to undertake detailed noise impact assessment and include specific noise controls required to comply with the project's noise trigger levels based on the specific uses of the site.

## 7. Lot M maximum noise levels

- Provide further justification as to why the maximum noise level assessment is based only on noise generated by Lot M, with regard to the location of other residential receivers and concurrent operation of warehouses on the other lots.

The *Noise Impact Assessment, Revision 6* include the assessment of the cumulative noise levels from use of all warehouses on the site. Sections 2 and details of the iNoise modelling, Table 18, includes the results of cumulative noise calculations with noise from use of all warehouses operational simultaneously.

Details of the source noise levels of Lot M in figures 9 and 10 includes the details of the sources of noise used on the modelling for other similar lots on the site (including Lots A, B, C, E, G, H, I, K, M, N and O). The cumulative noise assessments include all lots operational simultaneously.

Details included in Sections 6.5 (Warehouse F) includes an assessment of this lot only, in the event it is to be developed initially.

## 8. MRP DCP

- The NVIA is to be updated to address all controls of the MRP DCP (Section 4.3.1 Noise and Vibration). Feasible and reasonable acoustic design measures and noise attenuated equipment should be incorporated into the development (refer to Table 3.1 of the Noise Policy for Industry).

Section 4.3.1 of the MRP DCP includes the following requirements.

### 4.3.1 Noise and Vibration

#### Objectives

- a) To ensure noise and vibration do not adversely impact human health and amenity.
- b) To ensure building design adequately protects workers from noise and vibration.

#### Controls

- 1) Any machinery or activity considered to produce noise emissions from a premise shall be adequately sound-proofed so that noise emissions are in accordance with the provisions of the *Protection of the Environment Operations Act 1997*.
- 2) Noise should be assessed in accordance with *Noise Policy for Industry* (EPA, 2017) and *NSW Road Noise Policy* (Department of Environment, Climate Change and Water, 2011).
- 3) An Acoustic Report by a qualified acoustical engineer must be submitted where proposed development, including traffic generated by that development, will create noise and/or vibration impacts, either during construction or operation, that impacts on adjoining developments or nearby rural-residential areas. The Acoustic Report should outline the proposed noise amelioration strategies and management methods.
- 4) An Acoustic Report shall be prepared for developments within 500m of rural-residential areas and other sensitive receivers, including educational establishments.
- 5) Acoustic Reports for individual developments must assess cumulative noise impacts, including likely future noise emissions from the development and operation of the Precinct. The consultant should liaise with the relevant consent authority to determine acceptable amenity goals for individual industrial developments and background noise levels.
- 6) The use of mechanical plant and equipment may be restricted in areas close to sensitive receivers, such as adjoining rural-residential development and educational establishments.
- 7) Building design is to incorporate noise amelioration features. Roof elements are to control potential breakout noise, having regard to surrounding topography.
- 8) Boundary fences are to incorporate noise amelioration features and control breakout noise having regard to developments adjoining rural-residential areas.

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- 9) Development shall comply with the relevant Australian Standards for noise and vibration.
- 10) A qualified acoustical consultant is to certify any acoustic design measures have been satisfactorily incorporated into the development at construction certificate stage and validate the criteria at occupation certificate stage.

Based on the requirements of the DCP, the *Noise Impact Assessment, Revision 6* includes the assessment of the site in accordance with the EPA NPfI and *Road Noise Policy*. As such providing the recommendations include in the *Noise Impact Assessment, Revision 6* are included in the design of the proposed warehouses compliance with the MRP DCP will be achieve.

Section 5.1 of the revised *Noise Impact Assessment, Revision 7* includes the details of requirements of the MRP DCP.

## 9. Construction Vibration

- The NVIA should consider vibration impacts from construction activities on nearby structures on surrounding properties, particularly those close to the site boundary.

Section 10.6 of the *Noise Impact Assessment, Revision 7* includes the requirements for safe working distances to ensure construction vibration criteria will be achieved.

## 10. Road traffic noise

- The NVIA should clearly outline how road noise levels from additional traffic was evaluated and should assess the change in vehicle types on the road network, including evaluation of the potential road traffic noise impact associated with the use of 26m B-doubles and 30m A-doubles and the acceleration profiles of the different heavy vehicles generated by the development.

Section 7 of the *Noise Impact Assessment, version 6*, includes the assessment of additional traffic volumes resulting from the development.

The assessment includes the required future traffic noise levels based on the predicated traffic number for the site. The calculation includes a CoRTN assessment and details of the assessment are included in the sample calculation include in Table 25 of the report.

The use of the CoRTN model includes the acceptable method of assessment, as detailed in the *NSW Road Noise Policy* which includes the use of the CoRTN model is in Section B4 *Noise modelling methods* of the standard.

## 11. Acoustic effectiveness

- The NVIA should include the details and analysis of the effectiveness of proposed management and mitigation measures to adequately manage identified impacts, including a clear identification of residual noise and vibration following application of mitigation these measures and details of any proposed compliance monitoring programs.

The acoustic assessment has included the noise emission assessment and includes the predicted noise levels to surrounding receivers. Details throughout the report, including the results of the noise modelling, provide the results of cumulative noise levels which are compliant with the relevant noise emissions criteria. As such the report in total includes the required assessment and recommendations this item of the DPE.

If you have any additional questions, please contact the author below.

Regards

A handwritten signature in blue ink that reads "BG White". The letters are cursive and fluid, with the "B" and "G" being particularly prominent.

Ben White  
Director  
White Noise Acoustics