ATTACHMENT A – Response to clarifications from DPE noise consultant

Aspect	Issue	Response	Reference
Gap analysis of noise monitoring data	A response to our previous gaps analysis relating to a summary of all available baseline monitoring data and relevance of RBLs adopted has not been provided to date. Notwithstanding, further review of historical noise data relevant to the various stages of both the Moorebank Precinct East (MPE) and Moorebank Precinct West (MPW) project has been undertaken. The basis of adopting certain baseline sampling over others for determining representative background noise levels or rating background levels (RBLs) as per the EPA's Industrial Noise Policy (INP) is unclear. The MPE Stage 2 NVIA (Wilkinson Murray, November 2016) adopted data from the MPE Concept Plan EIS NVIA (Wilkinson Murray, August 2013). This data was collected by Wilkinson Murray in August 2012 or May 2013. This data is also adopted in the MPE Stage 1 NVIA (Wilkinson Murray, May 2015). The final adopted RBLs for assessment purposes in all these studies is as follows: • Wattle Grove (east of the site at 15 Larra Court): 42 dB, 37 dB and 37 dB for the day, evening and night respectively; • Casula (west of the site at 2 Rushton Place): 41 dB, 37 dB and 34 dB for the day, evening and night respectively; and • Glenfield (south west of the site at 14 Goodenough Street): 44 dB, 44 dB and 37 dB for the day, evening and night respectively. By comparison, the MPW Stage 2 NVIA (Wilkinson Murray, October 2016) adopts baseline monitoring data from a third party as reported in the MPW Concept Plan EIS NVIA (SLR 2014). This monitoring was collected in 2012 from SLR's continuous noise survey, and hence around a similar time to that in the Wilkinson Murray 2013 NVIA. The final adopted RBLs for assessment purposes in the MPW Stage 2 NVIA are: • Wattle Grove (east of the site at Corryton Court): 35 dB, 35 dB and 32 dB for the day, evening and night respectively; • Casula (west of the site at Buckland Road): 39 dB, 39 dB and 33 dB for the day, evening and night respectively; and	It is noted that there are minor variations in the RBLs at Wattle Grove, Casula and Glenfield between the MPW and MPE Projects. The RBLs for each respective Project were established at different times, under different Concept/Concept Plan assessments. The RBLs were established for both the MPW Concept and MPE Concept Plan in accordance with the requirements of the NSW Industrial Noise Policy (NSW EPA, 2000), and approved by the Department of Planning and Environment (NSW DP&E) as part of the MPW Concept Approval (SSD 5066, determined by the PAC on 3 June 2016) and MPE Concept Plan Approval (MP 10_0193, determined by the PAC on 29 September 2014). To maintain consistency with the RBLs in the MPW and MPE Concept Approvals, the noise and vibration impact assessments undertaken for the MPW Stage 2 Proposal, MPE Stage 2 Proposal and MPE Stage 1 Proposal have been undertaken in accordance with the previously approved RBLs. This is considered to be a valid and suitable process, and standard practice for approvals of this nature.	MPW Concept Approval (SSD 5066) MPE Concept Plan Approval (MP 0_0193) NSW INP

Aspect	Issue	Response	Reference
	• Glenfield (south west of the site at Goodenough Street): 35 dB, 35 dB and 33 dB for the day, evening and night respectively. Comparing the two sets of RBLs above for essentially the same or similar locations shows differences at all locations, which are material for Wattle Grove and Glenfield. This issue is a clear demonstration and evidence of the limitations in using sparsely deployed monitoring locations for such large geographic areas.		
Inconsistencies in predicted noise levels	The predicted noise levels in *Table 7-10 Predicted $L_{Aeq,15min}$ Noise Levels – MPE Stage 1 & MPE Stage 2* of the MPE Stage 2 EIS NVIA (Wilkinson Murray, November 2016 or Arcadis December 2016) are inconsistent with the MPE Stage 1 predictions. For example, MPE Stage 1 NVIA night adverse weather predictions (Wilkinson Murray, May 2015) are 39 dB $L_{Aeq,15min}$ for Wattle Grove (NCA1), while in the MPE Stage 2 document it is 32 dB $L_{Aeq,15min}$ for the two combined operations of MPE. This requires clarification. There may be implications from MPW changes for these results including warehouse buildings and the noise barrier proposed for MPW. However, the 7dB change shown here is difficult to explain with such structures being well removed from MPE noise sources given benefits of such are limited during adverse weather. All predictions for adverse weather during the night behave in this way, ie lower for the combined operations.	A review of the noise modelling for the MPE Stage 1 and MPE Stage 2 noise and vibration impact assessments has been undertaken. It is confirmed that the noise levels across the two assessments are consistent, and the 7dB change in the noise is attributed to the noise barrier created by the establishment of warehousing included as part of the MPE Stage 2 Proposal. Section 3.2 of the MPE Stage 2 Noise and Vibration Impact Assessment (Wilkinson Murray, 2016) noted that: *Solid objects which obstruct the line of sight between a noise source and a sensitive receiver will reduce the noise levels at the receiver. The magnitude of this shielding or 'barrier' effect is typically in the order of 5 – 10 dBA. Objects that offer significant levels of shielding may already be a feature of the area surrounding a development such as buildings and ground topography or may be established specifically to reduce noise levels such as earth mounds and noise walls.* Given the above, a 7dB change is not considered unusual, and within the expected shielding effect that warehousing and/ or the noise barrier on the MPW site may have on nearby sensitive receivers. As detailed in Section 7.3 of the MPE Stage 2 Noise and Vibration Impact Assessment: *Warehouses and other nearby buildings are likely to provide some level of shielding to sensitive receivers. The following buildings are included in the operational noise model:* • *Proposed warehouse buildings on the Proposal site;* • *Warehouse buildings on the MPE site, not proposed to be demolished under the MPE Stage 1 Proposal; and,*	MPE Stage 2 Noise and Vibration Impact Assessment (Wilkinson Murray, 2016) at Appendix M of the MPE Stage 2 EIS.

Aspect	Issue	Response	Reference
		• *Existing large buildings associated with ABB, DJLU and the industrial area to the north of DJLU.* *In addition to shielding from buildings, a noise wall, approximately 5 metres high, is proposed to be established along the western operational boundary of the Proposal site.*	