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Interlink Industrial Estate

**Erskine Park** 

Noise Impact Assessment

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# Noise Impact Assessment

PREPARED BY:

SLR Consulting Australia Pty Ltd ABN 29 001 584 612 Level 1, 14 Watt Street Newcastle NSW 2300 Australia

(PO Box 1768 Newcastle NSW 2300 Australia) T: 61 2 4908 4500 F: 61 2 4908 4501 E: newcastleau@slrconsulting.com www.slrconsulting.com

## DOCUMENT CONTROL

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#### 1 INTRODUCTION

SLR Consulting Australia Pty Ltd (SLR Consulting) has been engaged by Goodman International to prepare a Noise Impact Assessment (NIA) to accompany a Section 75W Application for proposed modifications to Lot 5, Interlink Industrial Estate, Mamre Road, Erskine Park.

Broadly, the objective of the NIA was to identify the potential impacts of noise from the proposed development and to provide advice with regard to effective mitigation strategies where necessary.

This NIA has been prepared with reference to Australian Standard AS 1055:1997 *Description and Measurement of Environmental Noise Parts 1, 2 and 3* and in accordance with the NSW Industrial Noise Policy (INP). Where issues relating to noise are not addressed in the INP, such as sleep disturbance, reference has been made to the NSW Environmental Noise Control Manual (ENCM). Reference has also been made to the Project Approval (MP 07\_0093) and the previous noise assessment for the site *Report 70-1306 Revision 0 Interlink Industrial Estate - Development of Lots 1,2 & 5 October 2007 Noise Impact Assessment* by Heggies Pty Ltd (now SLR Consulting).

### 2 PROJECT SETTING AND OVERVIEW

#### 2.1 **Project Setting**

Interlink Industrial Estate (the site) is located off Mamre Road in Erskine Park, and forms part of the Erskine Park Employment Area, which in turn forms part of the Western Sydney Employment Hub.

The site has an area of 64 hectares, is identified as Lots 1, 2 and 5 in DP 1124329, and is located within the Penrith local government area. A locality plan showing the development is contained in **Figure 1**.

#### Figure 1 Locality Plan



The Minister for Planning approved a major project application (MP 07\_0093) for the site in December 2007 for development of the undeveloped lots – namely Lots 1, 2 and 5. The project as approved involves (see **Figure 2**):

- Development of a warehouse and distribution facility for an unspecified future end-user on Lot 1 to be developed in two stages.
- Development of a light industrial and distribution facility for Ubeeco Packaging Solutions Pty Ltd on Lot 2.
- Development of a warehouse and distribution facility for Allied Pickfords Pty Ltd on Lot 5A.
- Development of a light industrial/warehouse and distribution facility for an unspecified future end-user on Lot 5B.





### 2.2 **Proposed Modification**

The proposed minor modification will primarily involve the creation of a single building to replace the two buildings approved for Lot 5. The proposed modification to Lot 5 is shown in **Figure 1**.





#### 3 RELEVANT CONSENT CONDITIONS

The relevant conditions pertaining to noise from 07\_0093 are reproduced below.

#### NOISE

27. The Proponent shall only carry out construction on the site between 7am and 6pm Monday to Friday, and 7am and 1pm on Saturdays. No construction is allowed on site on Sundays or public holidays.

Note: Construction activities may be conducted outside these hours provided that the activities are not audible at any residence beyond the boundary of the site.

28. During the project, the Proponent shall ensure that noise from the project and all other development on the Interlink Industrial Estate does not exceed the noise limits presented in Table 1.

Table 1: Project Noise Limits (dB(A))

Noise Assessment Location	Day	Evening	Night
	LAeg (15 minute)	LAeq (15 minute)	LAeq (15 minute)
Horseshoe Circuit	48	46	39
Blackwell Avenue	48	43	39

Notes:

- For the purposes of this condition, day is defined as the period from 7am to 6pm, Monday to Saturday, and 8am to 6pm, Sundays and Public Holidays. Evening is defined as the period from 6pm to 10pm. Night is defined as the period from 10pm to 7am, Monday to Saturday, and 10pm to 8am, Sundays and Public Holidays.
- Noise emission limits apply under meteorological conditions of wind speeds up to 3 m/s at 10 metres above ground level or temperature inversions conditions of 3 °C/100m and wind speed up to 2 m/s at 10 metres above the ground. To determine compliance with this condition, noise from the development must be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary.
- However, where it can be demonstrated that direct measurement of noise from the development is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.

#### 4 ASSESSMENT OF NOISE IMPACTS

#### 4.1 Noise Modelling Procedure

A computer model was used in the previous noise assessment to predict noise emissions from the proposed Interlink Industrial Estate. The Environmental Noise Model (ENM) used has been produced in conjunction with the OEH. A three-dimensional digital terrain map giving all relevant topographic information was used in the modelling process. The model used this map, together with noise source data, attended measurement data, ground cover, shielding by barriers and/or adjacent buildings and atmospheric information to predict noise levels at the nearest potentially affected receivers.

The noise model was revised to reflect the changes of the current proposal.

#### 4.2 Operational Scenario – Noise Model Summary

The operational scenarios modelled for the previous noise assessment were maintained in the revised noise model with the exception of the following:

• The two (2) buildings on Lot 5 were combined to form one (1) one larger building.

- Three (3) units were considered to operate within the building on Lot 5.
- An external gas powered forklift was considered in addition to those previously considered (two (2) large external forklifts on Lot 5 and Lot 2 and five (5) gas power forklifts throughout the development).

#### 4.3 Results of Noise Modelling

The results of the noise modelling show that the impact of the proposed changes to Lot 5 will have a negligible increase to the overall noise emissions from the Interlink Industrial Estate. The proposed development is predicted to comply with the noise consent condition set in relation to the development.

### 5 CONCLUSION

SLR Consulting has been engaged by Goodman International to prepare a NIA to accompany a Section 75W Application for proposed modifications to Lot 5, Interlink Industrial Estate, Mamre Road, Erskine Park.

Noise modelling was conducted to reflect the proposed changes to the development over that which was assessed in *Report 70-1306 Revision 0 Interlink Industrial Estate - Development of Lots 1,2 & 5 October 2007 Noise Impact Assessment.* 

The results indicate that there will be an insignificant change to the noise emissions from the Interlink Industrial Estate due to the proposed changes to Lot 5. The proposed development is predicted to comply with the noise consent condition set in relation to the operation of the development.

#### 6 CLOSURE

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

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