



HEGGIES

14 October 2008

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Sydney Gas Ltd  
Level 11, 1 O'Connell Street  
Sydney NSW 2000

**Attention: Alan Brew**

Dear Alan

## **Background Noise Level Investigation Broke, NSW**

### **1 Introduction**

Heggies Pty Ltd (Heggies) was requested by Sydney Gas Ltd to undertake background noise monitoring at Broke, NSW. The purpose of the monitoring was to determine the existing ambient acoustical environment of the area.

This report provides a summary of the ambient noise monitoring conducted by Heggies from Friday 26 September to Friday 3 October, 2008.

### **2 Methodology & Results**

#### **2.1 Operator Attended Noise Survey**

Operator attended noise measurements were conducted during the daytime period at both locations shown in **Appendix A**.

Each noise survey was conducted over a 15 minute period using a Brüel & Kjær 2250 integrating sound level meter (serial number 2600507). The results of the operator attended noise measurements are given in **Table 1**. Ambient noise levels given in the table include all noise sources such as road, insects, birds, as well as any industrial operations.

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**Table 1 Operator Attended Noise Survey Results**

| Location                                    | Date/<br>Start time/<br>Period/<br>Weather | Primary Noise Descriptor<br>(dBA re 20 µPa) |                 |                  |                  |                  | Description of Noise Emission,<br>Typical Maximum Levels LAmax<br>(dBA) |
|---|--|---|-----------------|------------------|------------------|------------------|---|
|   |  | L <sub>Amax</sub>                           | L <sub>A1</sub> | L <sub>A10</sub> | L <sub>A90</sub> | L <sub>Aeq</sub> |   |
| Location 1<br>19 Nelson<br>Street,<br>Broke | 29/09/2008                                 | 70  | 59              | 50               | 33               | 47               | Birds, 47 - 53  |
|   | 10.15 am                                   |   |                 |                  |                  |                  | Traffic on Broke road, 35-42  |
|   | Day  |   |                 |                  |                  |                  | People talking, to 42   |
|   | Wind 2.5 m/s<br>NE                         |   |                 |                  |                  |                  | Dog barking, 52   |
|   | Temp 30 °C                                 |   |                 |                  |                  |                  | Distant machinery, 38 - 40  |
|   |  |   |                 |                  |                  |                  | Car on nelson Street, 45  |
|   | Ute loading, 52 - 60                       |   |                 |                  |                  |                  |   |
|   |  |   |                 |                  |                  |                  | Wind in trees 45  |
|   |  |   |                 |                  |                  |                  | Insects, to 45  |
|   |  |   |                 |                  |                  |                  | Bobcat + reverse alarm, 64  |
| Location 2<br>Logger<br>compound            | 29/09/2008                                 | 58  | 48              | 42               | 33               | 39               | Truck on nelson Street, 49 - 52   |
|   | 11.00 am                                   |   |                 |                  |                  |                  | Birds, 39 - 42  |
|   | Day  |   |                 |                  |                  |                  | Wind gusts, 40 - 43   |
|   | Wind 2 m/s<br>NE                           |   |                 |                  |                  |                  | Insects, to 41  |
|   | Temp 30 °C                                 |   |                 |                  |                  |                  | Livestock, 38 - 42  |
|   |  |   |                 |                  |                  |                  | Dog at nearby residence, 43 - 48  |
|   | Plane in distance 41 - 44                  |   |                 |                  |                  |                  |   |
|   |  |   |                 |                  |                  |                  | Car nearby street 38 - 40   |

## 2.2 Unattended Continuous Noise Monitoring

The objective of the unattended continuous noise monitoring was to measure long-term LA90(15minute) and LAeq(15minute) noise levels.

Noise levels were monitored by Heggies at the two (2) locations shown in **Appendix A** from Friday 26 September 2008 to Friday 3 October, 2008. Measurements were conducted using two (2) ARL Type EL316 environmental noise loggers. Their respective locations and serial numbers are provided in **Table 2**.

**Table 2 Logger Serial Number and Type**

| Location                   | Logger Type | Serial Number |
|----------------------------|-------------|---------------|
| Location 1 Nelson Street   | ARL EL316   | 16-203-509    |
| Location 2 Logger compound | ARL EL316   | 16-302-482    |

Weather data representative of the site was collected. Any noise data during periods of rainfall and/or wind speeds in excess of 5 m/s (approximately 18 km/h) was discarded in accordance with INP weather affected data exclusion methodology. The results of the unattended continuous noise monitoring are provided in **Table 3**.



**Table 3 Summary of Existing Ambient Noise Levels**

| Location                              | Period  | Background LA90 Noise Level | Measured LAeq(Period) |
|---------------------------------------|---------|-----------------------------|-----------------------|
|                                       |         | Rating Background Level     |                       |
| Location 1<br>19 Nelson Street, Broke | Day     | 34 dBA                      | 57 dBA                |
|                                       | Evening | 35 dBA                      | 59 dBA                |
|                                       | Night   | 32 dBA                      | 52 dBA                |
| Location 2<br>Logger compound         | Day     | 32 dBA                      | 46 dBA                |
|                                       | Evening | 36 dBA                      | 44 dBA                |
|                                       | Night   | 32 dBA                      | 48 dBA                |

I trust that the above information is sufficient for your requirements. If there are any further comments or queries please do not hesitate to contact me on 02 4908 4500 or email [daniel.weston@heggies.com](mailto:daniel.weston@heggies.com)

Yours Sincerely,

DANIEL WESTON  
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