# 8. NOISE AND VIBRATION

## 8.1 INTRODUCTION

This chapter assesses the impact of the anticipated noise and vibration associated with the proposed amendments contained within this application at nearby sensitive locations.

The noise sources associated with the proposed amendments are identical to those originally assessed in the application of 2009. In terms of the current application the main potential for a change in the previously assessed noise impact relates to additional traffic on the local road network. This issue will be commented upon in detail.

The main plant has been in operation (through the commissioning phase) since October 2011. Therefore in order to determine the actual noise impact of the installation, noise monitoring data obtained from on-site noise monitors has been reviewed. This data has been supplemented with a brief attended noise survey with a view to identifying the noise levels associated with waste deliveries to the site.



In relation to construction noise and vibration it is understood that the no works of significance are associated with this application.

## 8.2 STUDY METHODOLOGY

The methodology adopted for this noise and vibration assessment is as follows:

- Characterisation of the receiving environment;
- Characterisation of the proposed development;
- Prediction of the noise and vibration impact associated with the proposed development;
- Evaluation of noise and vibration impacts.

In all cases, we have undertaken predictions and the impact assessment at the nearest noise sensitive residential locations surrounding the facility. Due to the nature of noise propagation, there is significant attenuation of noise as it travels away from the source, hence noise levels at more remote noise sensitive locations will be lower than noise levels predicted at the nearest residential locations. Therefore, noise impacts predicted at the nearest residential locations can be considered the "worst-case" scenario.

### 8.2.1 Environmental Noise Survey

As part on on-going works, two continuous noise monitors have been maintained on the site for the duration of the construction phase. The data obtained from these units prior to the commencement of construction activities and during a period when the site was commissioned and through the testing process has been reviewed. It is considered that this data presents a robust picture of the actual noise impact of the operational facility.

The noise monitoring was conducted in accordance with ISO 1996: *Acoustics – Description, measurement and assessment of environmental noise*: 2007. Specific details are set out in the following sections.

### 8.2.2 Choice of Measurement Locations

Measurement locations are indicated in Figure 8.1 and are summarised below.

*Location N1* is located at the site boundary in the eastern corner of the site and is considered representative of the noise levels at the dwelling adjacent to the east of the site on the R152.

*Location N2* is located at the site boundary in the western corner of the site, approximately 400m away from the nearest dwellings to the west of the site.

*Location N3* is located at the eastern site boundary and at a similar distance from the Indaver site buildings as Location N1. This location is however set-back from the R152 road approximately 200 metres. It is considered that measurements at this location offer a better indication as to site noise emissions with a reduced contribution from road traffic noise not associated with the site.



### 8.2.3 Survey Periods

Baseline

Attended daytime and night-time noise surveys were carried out at properties in the vicinity of the site in October and November 2005.

Additional baseline monitoring was conducted in order to establish the noise environment prior to the commencement of the construction phase in 2008. Noise data obtained from the two unattended noise monitors at Locations N1 and N2 between the period 6 to 19 August 2008 has been reviewed and is summarised in this document.

Commissioning

The commissioning period commenced in August 2011, and the plant has been accepting and treating waste volumes in line with full operation since end October 2011. and for the purposes of this study noise data from the Locations N1 and N2 obtained between the period of 11 November and 23 December 2011 has been reviewed.

An additional attended daytime survey has been carried out to identify noise levels associated with truck movements to and from the facility and from delivery activities once on site. This survey was completed on the afternoon of 12 January 2012.

While the facility is, at the time of writing, still in a commissioning phase the plant itself is fully operational and accepting waste volumes in line with its normal day to day activities. The facility operates continuously (i.e. 24 hours per day, seven days a week) with the exception of waste deliveries to site, which are restricted to daytime hours.

The weather for attended surveys was dry and mild with light winds (not exceeding 1m/s).



### 8.2.4 Instrumentation

The attended noise measurements were performed using a Brüel & Kjær Type 2260 Sound Level Analyser. The measurement apparatus was check calibrated before and after the surveys using a Brüel & Kjær type 4231 Sound Level Calibrator. No significant deviation was observed.

The unattended measurements and long term construction noise measurements were performed using Brüel & Kjær Type 2238 Sound Level Meters. Check calibrations using Brüel & Kjær Type 4231 Sound Level Calibrators are carried out at appropriate intervals.

### 8.2.5 Procedure

The short-term attended measurements were conducted at the two locations. Sample periods were 15-minutes. The results were noted onto a Survey Record Sheet immediately following each sample, and were also saved to the instrument memory for later analysis where appropriate. Survey personnel noted all primary noise sources contributing to noise build-up.

The long term monitoring is conducted at two fixed boundary locations. The meters are set to automatically log noise levels every 1-hour period.

### 8.2.6 Measurement Parameters

The attended noise survey results are presented in terms of the following parameters:

**$L_{Aeq}$** is the equivalent continuous sound level. It is a type of average and is used to describe a fluctuating noise in terms of a single noise level over the sample period. This parameter is representative of the specific noise from plant when plant is the dominant noise source, i.e. there is no extraneous noise from sources such as traffic.

**$L_{Amax}$** is the instantaneous maximum sound level measured during the sample period.

**$L_{Amin}$** is the instantaneous minimum sound level measured during the sample period.

**$L_{A10}$** is the sound level that is exceeded for 10% of the sample period. It is typically used as a descriptor for traffic noise.

**$L_{A90}$** is the sound level that is exceeded for 90% of the sample period. It is typically used as a descriptor for background noise. This parameter is representative of the specific noise from plant when there is extraneous noise from intermittent noise sources such as intermittent traffic.



The "A" suffix denotes the fact that the sound levels have been "A-weighted" in order to account for the non-linear nature of human hearing. All sound levels in this report are expressed in terms of decibels (dB) relative to $2x10^{-5}$ Pa. The unattended noise survey results are presented in terms of the $L_{Aeq}$, $L_{A10}$ and $L_{A90}$ parameters.

## 8.3 RECEIVING ENVIRONMENT

### 8.3.1 General Description

Lands surrounding the site are a mix of agricultural farmland and residential housing. The majority of private residences are located to the south and east along the R152 regional road with the density of housing increasing on the approach to the township of Duleek. Lands to the west of the site are predominantly agricultural farmland with isolated private residences. Lands to the north of the site are a mixture of agricultural farmland and commercial (Platin Cement works and quarry).

### 8.3.2 Baseline Noise Monitoring Results and Discussion

Location N1

The attended baseline noise monitoring results for Location N1 are summarised in Table 8.1 below.

**Table 8.1 Summary of attended baseline results for Location N1**

| Time | | Measured Noise Levels (dB re. $2x10^{-5}$ Pa) | | | | |
|---|---|---|---|---|---|---|
| | | $L_{Aeq}$ | $L_{Amax}$ | $L_{Amin}$ | $L_{A10}$ | $L_{A90}$ |
| Daytime 4 Oct 2005 | 12:21 – 12:36 | 75 | 90 | 43 | 80 | 50 |
| | 13:15 – 13:30 | 76 | 88 | 40 | 80 | 50 |
| | 14:10 – 14:25 | 76 | 89 | 42 | 81 | 51 |
| Daytime 6 Nov 2005 | 10:35 – 10:50 | 72 | 85 | 46 | 78 | 52 |
| | 11:34 – 11:49 | 72 | 87 | 38 | 77 | 51 |
| | 12:40 – 12:55 | 72 | 84 | 45 | 77 | 51 |
| Night-time 3-4 Oct 2005 | 23:51 – 00:06 | 63 | 83 | 23 | 61 | 31 |
| | 00:44 – 00:59 | 60 | 85 | 21 | 54 | 25 |
| | 01:40 – 01:55 | 59 | 85 | 21 | 47 | 25 |
| Night-time 5-6 Nov 2005 | 00:15 – 00:30 | 71 | 89 | 34 | 73 | 41 |
| | 01:09 – 01:24 | 68 | 87 | 29 | 65 | 33 |
| | 02:05 – 02:20 | 66 | 87 | 26 | 61 | 30 |



Traffic movements on the R152 regional road dominated daytime noise levels at this monitoring location. Plant and process noise from the nearby cement factory facility was also audible at this location during lulls in the traffic. Noise levels during daytime periods were in the range 72 to 76dB $L_{Aeq}$ and 50 to 52dB $L_{A90}$. These noise levels are typical of what would be expected adjacent to a moderately busy regional road.

Occasional traffic movements on the R152 regional road dominated night-time noise levels at this monitoring location. Noise levels during this period were in the range 59 to 71dB $L_{Aeq}$ and 25 to 33 $L_{A90}$. No significant sources of vibration were observed.

In addition to the above attended site surveys, unattended noise monitors were installed at location N1 in August 2008. These monitors have been installed on site in order to log noise levels continually through the construction phase of the project. The 2-week period from 6 to 19 August 2008 has been used in order to define the baseline environment prior to the commencement of the construction phase. The results of this baseline monitoring are summarised below and are presented in full in Appendix 8.1. Results are presented for daytime (i.e. 08:00 to 22:00) and night-time (i.e. 22:00 to 08:00) in terms of the arithmetic average of the hourly measured values. The noted reduction in noise from the continuous monitoring when compared to the manned survey results is due to the position of the sound level meter, whereby the monitoring station for the unattended survey was moved slightly further away from the road and positioned in line with the rear façade of the dwelling.

**Table 8.2 Summary of unattended baseline results for Location N1**

| Date | Period | Average Baseline Noise Levels (dB re. $2x10^{-5}$ Pa) | | |
|---|---|---|---|---|
| | | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 06/08/08 | Daytime (08:00 to 22:00) | 64 | 68 | 51 |
| 07/08/08 | | 64 | 68 | 52 |
| 08/08/08 | | 64 | 67 | 49 |
| 09/08/08 | | 63 | 67 | 50 |
| 10/08/08 | | 62 | 66 | 50 |
| 11/08/08 | | 64 | 68 | 52 |
| 12/08/08 | | 64 | 68 | 53 |
| 13/08/08 | | 64 | 67 | 52 |
| 14/08/08 | | 64 | 68 | 51 |
| 15/08/08 | | 64 | 68 | 53 |
| 16/08/08 | | 64 | 67 | 51 |
| 17/08/08 | | 62 | 66 | 48 |
| 18/08/08 | | 64 | 68 | 50 |
| 06-07/08/08 | Night-time (22:00 to 08:00) | 58 | 59 | 35 |
| 07-08/08/08 | | 58 | 60 | 43 |
| 08-09/08/08 | | 58 | 62 | 39 |
| 09-10/08/08 | | 58 | 62 | 37 |
| 10-11/08/08 | | 58 | 61 | 41 |
| 11-12/08/08 | | 58 | 60 | 40 |
| 12-13/08/08 | | 58 | 60 | 39 |
| 13-14/08/08 | | 59 | 61 | 40 |
| 14-15/08/08 | | 59 | 62 | 39 |
| 15-16/08/08 | | 59 | 62 | 42 |
| 16-17/08/08 | | 60 | 56 | 36 |
| 17-18/08/08 | | 58 | 61 | 39 |
| 18-19/08/08 | | 58 | 59 | 43 |



During daytime periods, the average ambient noise level for the period 6 to 18 August 2008 is 64dB $L_{Aeq.}$ The average background noise level is 51dB $L_{A90}$.

During night-time periods, the average ambient noise level for the period 6 to 19 August 2008 is 58dB $L_{Aeq.}$ The average background noise level is 39dB $L_{A90}$.

Location N2

The attended baseline noise monitoring results for Location N2 are summarised in Table 8.3 below.

**Table 8.3 Summary of attended baseline results for Location N2**

| Time | | Measured Noise Levels (dB re. $2x10^{-5}$ Pa) | | | | |
|---|---|---|---|---|---|---|
| | | $L_{Aeq}$ | $L_{Amax}$ | $L_{Amin}$ | $L_{A10}$ | $L_{A90}$ |
| Daytime 4 Oct 2005 | 11:45 – 12:00 | 49 | 59 | 41 | 51 | 45 |
| | 12:39 – 12:54 | 47 | 63 | 41 | 49 | 43 |
| | 13:32 – 13:47 | 49 | 61 | 40 | 50 | 44 |
| Daytime 6 Nov 2005 | 09:55 – 10:10 | 44 | 64 | 31 | 47 | 35 |
| | 09:53 – 11:08 | 47 | 63 | 33 | 51 | 36 |
| | 11:57 – 12:12 | 57 | 77 | 32 | 49 | 36 |
| Daytime 17 Nov 2005 | 15:15 – 15:30 | 56 | 74 | 39 | 56 | 43 |
| | 15:30 – 15:45 | 50 | 68 | 42 | 52 | 45 |
| | 15:45 – 16:00 | 50 | 70 | 42 | 52 | 45 |
| | 16:00 – 16:15 | 50 | 64 | 43 | 51 | 46 |
| | 16:15 – 16:30 | 48 | 59 | 45 | 50 | 46 |
| Night-time 3-4 Oct 2005 | 23:15 – 23:30 | 39 | 60 | 23 | 43 | 27 |
| | 00:08 – 00:23 | 38 | 53 | 23 | 42 | 28 |
| | 01:01 – 01:16 | 39 | 54 | 22 | 43 | 26 |
| Night-time 5-6 Nov 2005 | 23:30 – 23:45 | 45 | 55 | 33 | 47 | 38 |
| | 00:35 – 00:50 | 47 | 75 | 38 | 49 | 42 |
| | 01:28 – 01:43 | 45 | 68 | 35 | 48 | 40 |



Daytime noise levels at this monitoring location were dominated by distant traffic noise from the M1 motorway and R152 regional road. During the weekday survey periods, there was also noise from equipment operating at the Platin Cement site with quarry equipment the dominant noise source from this site. We note that the higher measured noise level during the surveys on 6 and 17 November 2005 (57dB and 56dB $L_{Aeq}$) were dominated by farm machinery operating in the vicinity of the measurement location. Excluding these samples, noise levels during the weekday daytime periods were in the range 47 to 50dB $L_{Aeq}$ and 43 to 46dB $L_{A90}$ Noise levels during the weekend daytime periods were in the range 44 to 47dB $L_{Aeq}$ and 35 to 36dB $L_{A90}$. These surveys give an indication of the contribution due to noise from the Platin Cement works.

Night-time noise levels at this monitoring location were dominated by distant traffic noise from the M1 motorway and R152 regional road. Noise levels during this period were in the range 38 to 47dB $L_{Aeq}$ and 26 to 42dB $L_{A90}$. We note that noise levels measured during the second night survey period (i.e. 5 – 6 November 2005) were higher than the first survey period due to increased wind generated noise in trees and foliage adjacent to the survey position.

These noise levels are typical of what would be expected in the type of environment under consideration. No significant sources of vibration were observed.

In addition to the above attended site surveys, unattended noise monitors were installed on the site in August 2008. These monitors have been installed on site in order to log noise levels continually through the construction phase of the project. The 2-week period from 6 to 19 August 2008 has been used in order to define the baseline environment prior to the construction phase. The results of this baseline monitoring are summarised below and are presented in Appendix 8.1. Results are presented for daytime (i.e. 08:00 to 22:00) and night-time (i.e. 22:00 to 08:00) in terms of the arithmetic average of the hourly measured values.



**Table 8.4 Summary of unattended baseline results for Location N2**

| Date | Period | Average Baseline Noise Levels (dB re. $2x10^{-5}$ Pa) | | |
|---|---|---|---|---|
| | | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 06/08/08 | Daytime (08:00 to 22:00) | 50 | 52 | 45 |
| 07/08/08 | | 48 | 50 | 44 |
| 08/08/08 | | 49 | 49 | 40 |
| 09/08/08 | | 47 | 50 | 43 |
| 10/08/08 | | 49 | 51 | 44 |
| 11/08/08 | | 52 | 54 | 47 |
| 12/08/08 | | 49 | 50 | 43 |
| 13/08/08 | | 49 | 50 | 42 |
| 14/08/08 | | 49 | 50 | 43 |
| 15/08/08 | | 51 | 53 | 46 |
| 16/08/08 | | 54 | 57 | 50 |
| 17/08/08 | | 50 | 52 | 43 |
| 18/08/08 | | 55 | 57 | 51 |
| 06-07/08/08 | Night-time (22:00 to 08:00) | 42 | 44 | 32 |
| 07-08/08/08 | | 44 | 46 | 41 |
| 08-09/08/08 | | 48 | 51 | 38 |

| Date | Period | Average Baseline Noise Levels (dB re. $2x10^{-5}$ Pa) | | |
|---|---|---|---|---|
| | | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 09-10/08/08 | | 44 | 48 | 36 |
| 10-11/08/08 | | 46 | 49 | 39 |
| 11-12/08/08 | | 45 | 48 | 39 |
| 12-13/08/08 | | 43 | 46 | 36 |
| 13-14/08/08 | | 44 | 47 | 37 |
| 14-15/08/08 | | 47 | 50 | 35 |
| 15-16/08/08 | | 50 | 53 | 43 |
| 16-17/08/08 | | 45 | 48 | 37 |
| 17-18/08/08 | | 48 | 51 | 39 |
| 18-19/08/08 | | 47 | 49 | 43 |

During daytime periods, the average ambient noise level for the period 6 to 18 August 2008 is 50dB $L_{Aeq.}$ The average background noise level is 45dB $L_{A90}$.

During night-time periods, the average ambient noise level for the period 6 to 19 August 2008 is 46dB $L_{Aeq.}$ The average background noise level is 38dB $L_{A90}$.

### 8.3.3 Commissioning Noise Monitoring Results and Discussion

It is understood that construction of the Indaver project was completed in October 2011. The following sections present the noise monitoring results for the Locations N1 and N2 for the period 11 November to 23 December 2011. It is considered that this period gives an indication of the site noise emissions following the commencement of the operation phase of the development.

Location N1

The noise monitoring results for Location N1 are summarised in Table 8.5 below. The results of this monitoring are presented in Appendix 8.2. Results are presented for daytime (i.e. 08:00 to 22:00) and night-time (i.e. 22:00 to 08:00) in terms of the arithmetic average of the hourly measured values.

**Table 8.5 Summary of commissioning results for Location N1**

| Date | Period | Average Noise Levels (dB re. $2x10^{-5}$ Pa) | | |
|---|---|---|---|---|
| | | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 11/11/2011 | Daytime (08:00 to 22:00) | 64 | 68 | 52 |
| 12/11/2011 | | 62 | 66 | 48 |
| 13/11/2011 | | 61 | 65 | 48 |
| 14/11/2011 | | 63 | 67 | 51 |
| 15/11/2011 | | 62 | 66 | 50 |
| 16/11/2011 | | 63 | 67 | 49 |
| 17/11/2011 | | 65 | 68 | 54 |
| 18/11/2011 | | 63 | 67 | 51 |
| 19/11/2011 | | 61 | 65 | 47 |
| 20/11/2011 | | 61 | 65 | 46 |
| 21/11/2011 | | 62 | 66 | 48 |
| 22/11/2011 | | 63 | 67 | 51 |
| 23/11/2011 | | 63 | 66 | 52 |
| 24/11/2011 | | 64 | 67 | 54 |
| 25/11/2011 | | 63 | 67 | 54 |
| 26/11/2011 | | 62 | 66 | 52 |
| 27/11/2011 | | 61 | 65 | 50 |
| 28/11/2011 | | 64 | 67 | 52 |
| 29/11/2011 | | 64 | 67 | 53 |
| 30/11/2011 | | 63 | 66 | 51 |
| 01/12/2011 | | 64 | 68 | 54 |

| Date | Period | Average Noise Levels (dB re. $2x10^{-5}$ Pa) | | |
|---|---|---|---|---|
| | | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 02/12/2011 | | 63 | 67 | 52 |
| 03/12/2011 | | 61 | 66 | 48 |
| 04/12/2011 | | 61 | 65 | 47 |
| 05/12/2011 | | 63 | 66 | 51 |
| 06/12/2011 | | 63 | 67 | 51 |
| 07/12/2011 | | 63 | 67 | 51 |
| 08/12/2011 | | 64 | 67 | 54 |
| 09/12/2011 | | 63 | 66 | 53 |
| 10/12/2011 | | 62 | 66 | 49 |
| 11/12/2011 | | 61 | 65 | 48 |
| 12/12/2011 | | 64 | 68 | 53 |
| 13/12/2011 | | 65 | 68 | 55 |
| 14/12/2011 | | 63 | 66 | 52 |
| 15/12/2011 | | 63 | 67 | 53 |
| 16/12/2011 | Daytime (08:00 to 22:00) | 62 | 66 | 52 |
| 17/12/2011 | | 61 | 65 | 51 |
| 18/12/2011 | | 60 | 64 | 48 |
| 19/12/2011 | | 63 | 67 | 52 |
| 20/12/2011 | | 64 | 67 | 52 |
| 21/12/2011 | | 63 | 67 | 53 |
| 22/12/2011 | | 63 | 67 | 53 |
| 23/12/2011 | | 62 | 66 | 52 |
| 11-12/11/2011 | Night-time (22:00 to 08:00) | 56 | 59 | 38 |
| 12-13/11/2011 | | 55 | 57 | 42 |
| 13-14/11/2011 | | 55 | 56 | 41 |
| 14-15/11/2011 | | 55 | 55 | 42 |
| 15-16/11/2011 | | 55 | 56 | 42 |
| 16-17/11/2011 | | 56 | 57 | 41 |
| 17-18/11/2011 | | 57 | 59 | 45 |
| 18-19/11/2011 | | 56 | 58 | 40 |
| 19-20/11/2011 | | 55 | 57 | 43 |
| 20-21/11/2011 | | 55 | 56 | 42 |
| 21-22/11/2011 | | 55 | 56 | 44 |

| Date | Period | Average Noise Levels (dB re. $2x10^{-5}$ Pa) | | |
|---|---|---|---|---|
| | | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 22-23/11/2011 | | 56 | 57 | 43 |
| 23-24/11/2011 | | 56 | 58 | 42 |
| 24-25/11/2011 | | 57 | 59 | 44 |
| 25-26/11/2011 | | 56 | 59 | 45 |
| 26-27/11/2011 | | 58 | 62 | 50 |
| 27-28/11/2011 | | 55 | 57 | 43 |
| 28-29/11/2011 | | 59 | 62 | 48 |
| 29-30/11/2011 | | 56 | 57 | 43 |
| 30/11-1/12/2011 | | 56 | 57 | 43 |
| 1-2/12/2011 | | 56 | 58 | 44 |
| 2-3/12/2011 | | 56 | 58 | 41 |
| 3-4/12/2011 | | 55 | 57 | 43 |
| 4-5/12/2011 | | 55 | 57 | 40 |
| 5-6/12/2011 | | 55 | 56 | 42 |
| 6-7/12/2011 | | 56 | 57 | 42 |
| 7-8/12/2011 | | 56 | 58 | 44 |
| 8-9/12/2011 | | 56 | 58 | 44 |
| 9-10/12/2011 | | 55 | 57 | 43 |
| 10-11/12/2011 | | 55 | 58 | 42 |
| 11-12/12/2011 | | 55 | 57 | 43 |
| 12-13/12/2011 | | 56 | 59 | 44 |
| 13-14/12/2011 | | 57 | 59 | 45 |
| 14-15/12/2011 | | 56 | 58 | 44 |
| 15-16/12/2011 | | 55 | 57 | 44 |
| 16-17/12/2011 | | 56 | 58 | 45 |
| 17-18/12/2011 | | 55 | 57 | 45 |
| 18-19/12/2011 | | 56 | 58 | 38 |
| 19-20/12/2011 | | 56 | 57 | 39 |
| 20-21/12/2011 | | 57 | 59 | 42 |
| 21-22/12/2011 | | 56 | 58 | 45 |
| 22-23/12/2011 | | 58 | 61 | 46 |

During daytime periods, the average ambient noise level for the period 11 November to 23 December 2011 is 63dB $L_{Aeq.}$ The average background noise level is 51dB $L_{A90}$.

During night-time periods, the average ambient noise level for the period 11 November to 23 December 2011 is 56dB $L_{Aeq.}$ The average background noise level is 43dB $L_{A90}$.

Location N2

The commissioning noise monitoring results for Location N2 are summarised in Table 8.6 below. The results of this monitoring are presented in Appendix 8.2. Results are presented for daytime (i.e. 08:00 to 22:00) and night-time (i.e. 22:00 to 08:00) in terms of the arithmetic average of the hourly measured values.

**Table 8.6 Summary of commissioning results for Location N2**

| Date | Period | Average Noise Levels (dB re. $2x10^{-5}$ Pa) | | |
|---|---|---|---|---|
| | | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 11/11/2011 | Daytime (08:00 to 22:00) | 55 | 57 | 52 |
| 12/11/2011 | | 52 | 54 | 46 |
| 13/11/2011 | | 51 | 53 | 47 |
| 14/11/2011 | | 53 | 55 | 49 |
| 15/11/2011 | | 53 | 55 | 48 |
| 16/11/2011 | | 53 | 55 | 48 |
| 17/11/2011 | | 58 | 59 | 54 |
| 18/11/2011 | | 58 | 60 | 54 |
| 19/11/2011 | | 56 | 58 | 52 |
| 20/11/2011 | | 55 | 56 | 52 |
| 21/11/2011 | | 54 | 56 | 51 |
| 22/11/2011 | | 55 | 57 | 51 |
| 23/11/2011 | | 55 | 56 | 52 |
| 24/11/2011 | | 56 | 58 | 52 |
| 25/11/2011 | | 54 | 56 | 51 |
| 26/11/2011 | | 55 | 58 | 50 |
| 27/11/2011 | | 49 | 51 | 46 |
| 28/11/2011 | | 54 | 57 | 50 |
| 29/11/2011 | | 54 | 56 | 49 |
| 30/11/2011 | | 54 | 55 | 50 |

| Date | Period | Average Noise Levels (dB re. $2x10^{-5}$ Pa) | | |
|---|---|---|---|---|
| | | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 01/12/2011 | | 56 | 58 | 52 |
| 02/12/2011 | | 55 | 58 | 51 |
| 03/12/2011 | | 53 | 55 | 48 |
| 04/12/2011 | | 51 | 53 | 48 |
| 05/12/2011 | | 54 | 56 | 49 |
| 06/12/2011 | | 53 | 55 | 49 |
| 07/12/2011 | | 54 | 55 | 50 |
| 08/12/2011 | | 55 | 58 | 51 |
| 09/12/2011 | | 52 | 54 | 48 |
| 10/12/2011 | | 50 | 52 | 46 |
| 11/12/2011 | | 49 | 51 | 46 |
| 12/12/2011 | | 55 | 58 | 51 |
| 13/12/2011 | | 58 | 60 | 54 |
| 14/12/2011 | | 55 | 57 | 50 |
| 15/12/2011 | | 55 | 58 | 50 |
| 16/12/2011 | | 53 | 55 | 48 |
| 17/12/2011 | | 50 | 52 | 47 |
| 18/12/2011 | Daytime (08:00 to 22:00) | 48 | 49 | 45 |
| 19/12/2011 | | 54 | 56 | 48 |
| 20/12/2011 | | 52 | 54 | 48 |
| 21/12/2011 | | 53 | 55 | 49 |
| 22/12/2011 | | 54 | 56 | 50 |
| 23/12/2011 | | 51 | 54 | 47 |
| 11-12/11/2011 | Night-time (22:00 to 08:00) | 46 | 49 | 40 |
| 12-13/11/2011 | | 45 | 47 | 42 |
| 13-14/11/2011 | | 44 | 46 | 41 |
| 14-15/11/2011 | | 44 | 46 | 42 |
| 15-16/11/2011 | | 44 | 46 | 41 |
| 16-17/11/2011 | | 46 | 48 | 43 |
| 17-18/11/2011 | | 55 | 57 | 52 |
| 18-19/11/2011 | | 55 | 58 | 52 |
| 19-20/11/2011 | | 53 | 54 | 51 |
| 20-21/11/2011 | | 53 | 55 | 51 |

| Date | Period | Average Noise Levels (dB re. $2x10^{-5}$ Pa) | | |
|---|---|---|---|---|
| | | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 21-22/11/2011 | | 47 | 49 | 45 |
| 22-23/11/2011 | | 47 | 48 | 44 |
| 23-24/11/2011 | | 48 | 49 | 44 |
| 24-25/11/2011 | | 47 | 48 | 44 |
| 25-26/11/2011 | | 48 | 50 | 45 |
| 26-27/11/2011 | | 55 | 58 | 50 |
| 27-28/11/2011 | | 47 | 48 | 45 |
| 28-29/11/2011 | | 53 | 55 | 49 |
| 29-30/11/2011 | | 47 | 48 | 44 |
| 30/11-1/12/2011 | | 46 | 48 | 44 |
| 1-2/12/2011 | | 51 | 52 | 48 |
| 2-3/12/2011 | | 50 | 52 | 45 |
| 3-4/12/2011 | | 48 | 49 | 46 |
| 4-5/12/2011 | | 47 | 49 | 45 |
| 5-6/12/2011 | | 45 | 47 | 43 |
| 6-7/12/2011 | | 46 | 48 | 43 |
| 7-8/12/2011 | | 48 | 50 | 45 |
| 8-9/12/2011 | | 47 | 49 | 44 |
| 9-10/12/2011 | | 46 | 47 | 43 |
| 10-11/12/2011 | | 46 | 48 | 44 |
| 11-12/12/2011 | | 46 | 48 | 44 |
| 12-13/12/2011 | | 50 | 52 | 46 |
| 13-14/12/2011 | | 51 | 54 | 47 |
| 14-15/12/2011 | | 47 | 48 | 45 |
| 15-16/12/2011 | | 46 | 47 | 44 |
| 16-17/12/2011 | | 48 | 50 | 44 |
| 17-18/12/2011 | | 46 | 47 | 44 |
| 18-19/12/2011 | | 45 | 47 | 41 |
| 19-20/12/2011 | | 44 | 46 | 42 |
| 20-21/12/2011 | | 47 | 49 | 43 |
| 21-22/12/2011 | | 49 | 51 | 45 |
| 22-23/12/2011 | | 48 | 50 | 46 |

During daytime periods, the average ambient noise level for the period 11 November to 23 December 2011 is 54dB $L_{Aeq.}$ The average background noise level is 49dB $L_{A90}$.

During night-time periods, the average ambient noise level for the period 11 November to 23 December 2011 is 48dB $L_{Aeq.}$ The average background noise level is 45dB $L_{A90}$.

Noise Survey of Waste Deliveries to Site

The results of the attended noise survey of waste delivery and unloading at the site are summarised in Table 8.7 below. Measurement locations are indicated in Figure 8.1.

**Table 8.7 Summary of Waste Delivery Survey**

| Location | Time | Measured Noise Levels (dB re. $2x10^{-5}$ Pa) | | | | | Notes |
|---|---|---|---|---|---|---|---|
| | | $L_{Aeq}$ | $L_{Amax}$ | $L_{Amin}$ | $L_{A10}$ | $L_{A90}$ | |
| N2 | 12:16 - 12:34 | 51 | 65 | 45 | 52 | 46 | No deliveries during this period. |
| | 12:34 - 12:49 | 53 | 66 | 45 | 55 | 48 | Waste delivery of the largest type truck with hydraulic ram. Slight audible increase in noise from previous measurement however the main unloading activities are internal. |
| N3 | 10:40 - 10:55 | 52 | 74 | 48 | 52 | 50 | Distant plant from Indaver and Platin Cement sites both audible. Distant traffic also audible. Waste deliveries not audible at this location. |
| | 10:55 - 11:10 | 51 | 57 | 58 | 52 | 49 | |
| | 11:10 - 11:25 | 51 | 65 | 45 | 52 | 49 | |



At the site boundary Location N2, the measured delivery noise level was 53dB $L_{Aeq}$. It should be noted that there is an additional approximate 400 metres from this boundary location to the nearest residential property. Delivery noise levels would therefore be expected to further reduce when consideration is given to the increased distances involved. Waste deliveries were not audible at the eastern boundary location N3.

## 8.4 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

The proposal under consideration includes for an increase in the volume of waste that is handled at the existing facility. The potential noise elements of the facility are process machinery and plant located internally and externally. The major noise sources include condensers, turbines furnaces, boilers and discharge stack.

## 8.5 POTENTIAL IMPACT OF THE PROPOSED DEVELOPMENT

### 8.5.1 Construction Noise Criteria

There are no significant construction activities proposed in relation to this application. Minor construction in terms of paving and formation of hardstanding, the addition of 22 additional car park spaces and the installation of a Puraflo effluent treatment system to the existing facility are planned.

While no significant construction activities are related to this application it is considered prudent to restate the relevant construction noise limits that apply to the site. As part of the planning permission the following condition was attached relating to noise during the construction phase of the project.



Condition No. 18:

> *"During the construction phase of the proposed development, noise level at the site when measured at noise sensitive locations shall not exceed 65dBA between the hours of 0700 hours and 1900 hours, Monday to Saturday inclusive, excluding bank and public holidays and Sundays and 45dBA at any other time.*
>
> *Noise monitoring locations for the purposes of the construction phase shall be agreed in writing with the Planning Authority prior to commencement of any development on site. The locations shall be situated proximate to the nearest residential buildings."*

Although the assessment parameter and reference time period has not been referenced specifically in the above condition, it is assumed that the limits are set in $L_{Aeq,1hour}$, which would be one typically used for the assessment and monitoring of construction noise impacts.

### 8.5.2 Operational Noise Criteria

Due consideration must be given to the nature of the primary noise sources when setting criteria. Criteria for noise from process and building services plant will be set in terms of $L_{Aeq}$ the equivalent continuous sound level.

The Environmental Protection Agency Waste Licence that is applicable to the facility (Ref:W0167-02) specifies the following noise limits at the façades of residential properties closest to the development:

| | |
|---|---|
| Daytime (08:00hrs to 22:00hrs) | 55dB $L_{Aeq,30min}$ |
| Night-time (22:00hrs to 08:00hrs) | 45dB $L_{Aeq,30min}$ |

Whilst the application of absolute noise limits to a development ensures that overall impact is kept within acceptable margins, it does not assist with the assignation of relative impacts. In order to do this, it is appropriate to consider the likely change in ambient noise level as a result of the scheme under consideration. Table 8.8 offers guidance as to the likely impact on the surrounding environment associated with a change in ambient noise level.

**Table 8.8 Significance criteria associated with change in noise level**

| Change in Ambient Noise Level (dB $L_{Aeq}$) | Subjective Reaction | Impact |
|---|---|---|
| < 3 | Imperceptible | Negligible |
| 3 – 5 | Perceptible | Slight |
| 6 – 10 | Up to a doubling of loudness | Moderate |
| 11 – 15 | Over a doubling of loudness | Significant |
| > 15 | | Profound |



### 8.5.3 Vibration Guidelines

Construction Phase

No significant construction activities are proposed in relation to this application. The associated vibration impact of the minor construction works proposed is not considered significant in terms of the potential for vibration at nearby sensitive locations.

Operational Phase

British Standard BS 6472 (2008) '*Guide to evaluation of human exposure to vibration in buildings. Vibration sources other than blasting'* contains recommendations that continuous vibration in residential buildings should not exceed nominally 0.3mm/s by daytime and 0.2mm/s by night-time.

### 8.5.4 Construction Phase Assessment

It is predicted that the construction programme will create typical construction activity related noise on site. During the construction phase of the proposed development, a variety of items of plant will be in use, such as excavators, lifting equipment, dumper trucks, compressors and generators.

Due to the nature of the activities undertaken on a construction site of this nature, there is potential for generation of levels of noise. The flow of vehicular traffic to and from a construction site is also a potential source of relatively high noise levels. The potential for vibration at neighbouring sensitive locations during construction is typically limited to excavation works and lorry movements on uneven road surfaces. Due to the proximity of sensitive locations to potential site access points, the more significant of these is likely to be uneven road surfaces. However, there is little likelihood of structural or even cosmetic damage to existing neighbouring dwellings.

Due to the fact that the construction programme has been established in outline form only, it is difficult to calculate the actual magnitude of noise emissions to the local environment. However, Table 8.9 indicates typical noise levels that would be expected from the proposed construction site during the various phases of the construction project.



For the purposes of the assessment we have assumed that standard good practice measures for the control of noise from construction sites will be implemented. These issues are commented upon in further detail in the mitigation section of this report.

**Table 8.9 Typical Noise Levels Associated with Construction Plant Items**

| Description (BS 5228 Ref) | A-weighted Sound Pressure Level re $10^{-5}$ Pa Octave Band Centre Frequency (Hz) | | | | | | | | dB(A) 10m |
|---|---|---|---|---|---|---|---|---|---|
| | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | |
| Excavator (C2 03) | 80 | 83 | 76 | 73 | 72 | 70 | 69 | 69 | 78 |
| Dozer (C2 11) | 75 | 79 | 77 | 77 | 74 | 71 | 65 | 57 | 79 |
| Dump Truck Tipping (C2 22) | 80 | 76 | 73 | 70 | 69 | 66 | 63 | 58 | 74 |
| Tracked Mobile Crane (C3 28) | 81 | 77 | 66 | 62 | 59 | 57 | 51 | 46 | 67 |

These noise spectra have been converted to equivalent sound power levels and sound pressure levels associated with the construction sources have been predicted to the nearest noise sensitive locations. Table 8.10 outlines the noise levels associated with these construction noise sources at these locations.

**Table 8.10 Predicted Levels of Construction Noise at Sensitive Locations**

| Description (BS 5228 Ref) | A-weighted Sound Pressure Level re $10^{-5}$ Pa (dB) | | | | |
|---|---|---|---|---|---|
| | NSL1 | NSL2 | NSL3 | NSL4 | NSL5 |
| Excavator (C2 03) | 33 | 44 | 53 | 42 | 37 |
| Dozer (C2 11) | 34 | 45 | 54 | 43 | 38 |
| Dump Truck Tipping (C2 22) | 29 | 40 | 49 | 38 | 33 |
| Tracked Mobile Crane (C3 28) | 22 | 33 | 42 | 31 | 26 |
| Total | 37 | 48 | 57 | 46 | 42 |



The predicted noise levels from construction activities are in the range of 37 to 57dB $L_{Aeq,1hr}$ at these locations. These levels would be comparable to prevailing ambient noise levels in these areas.

In all instances the total predicted noise levels are predicted to be below the appropriate daytime noise limit (i.e. 65dB $L_{Aeq,1hr}$) and therefore a significant effect is not predicted in relation to the nearest noise sensitive locations in terms of construction noise.

Note that the predicted noise levels referred to in this section are indicative only and are intended to demonstrate that it will be possible for the contractor to comply with current best practice guidance. It should also be noted that the predicted "worst case" levels are expected to occur for only short periods of time at a very limited number of properties. Construction noise levels will be lower than these levels for the majority of the time at the majority of properties in the vicinity of the proposed development.

### 8.5.5 Operational Phase Assessment

Each primary noise source that has been identified as part of the development operational phase is addressed in turn below.

Assessment of Building Services Plant

Table 8.11 presents the commissioning noise survey results, when compared to the baseline study and the EPA IPPC noise limits relevant to the site.

**Table 8.11 Assessment of Site Noise Emissions**

| Location | Period | Average Baseline 2008 | | Average Commissioning 2011 | | EPA IPPC Criteria dB $L_{Aeq,30min}$ | Satisfies ? |
|---|---|---|---|---|---|---|---|
| | | dB $L_{Aeq}$ | dB $L_{A90}$ | dB $L_{Aeq}$ | dB $L_{A90}$ | | |
| N1 | Daytime 08:00 - 22:00 | 64 | 51 | 63 | 51 | 55 | Yes* |
| N2 | | 50 | 45 | 54 | 49 | | Yes |
| N1 | Night-time 22:00 - 08:00 | 58 | 39 | 56 | 43 | 45 | Yes* |
| N2 | | 46 | 38 | 48 | 45 | | Yes* |

* See Notes Below



It is noted that the $L_{Aeq}$ noise measurements conducted at location N1 include a significant contribution from road traffic from the nearby R152. In these instances the $L_{A90}$ parameter offers a better reflection as to the magnitude of plant noise emissions. It is noted that, following the opening of the facility, there has been no significant increase in $L_{A90}$ noise levels at Location N1. The average $L_{A90}$ values at Location N1 are also within the relevant daytime and night-time noise limits appropriate to the site.

The average daytime $L_{Aeq}$ and $L_{A90}$ values at Location N2 are within the relevant daytime noise limits appropriate to the site. The average night-time $L_{Aeq}$ value marginally exceeds the EPA IPPC Criteria, when measured at the site boundary. However this was also the case during the baseline study and it should be noted that the site licence specifies the noise limits *'at the façades of residential properties closest to the development'*. The nearest residential property to the boundary measurement Location N2 is approximately 400 metres to the west of the site. It is therefore calculated that night-time plant noise emissions at the façade of the nearest residential property to the boundary Location N2 will be well within the noise limits appropriate to the site.

Review of the commissioning noise monitoring results presented above confirms that the site is operating within the relevant EPA IPPC noise limits that are outlined in the licence.

The proposed increase in volume of waste that is to be handled by the facility is not envisaged to result in a significant change of this situation and therefore the associated noise impact from building services plant is negligible.

Assessment of Deliveries to Site

It is understood that the hours of operation for waste deliveries to site are currently Monday to Friday 08:00 to 18:30hrs and Saturdays 08:00 to 14:00hrs. The relevant noise limit for deliveries to site is therefore 55dB $L_{Aeq,30min}$ at the façade of the nearest residential dwellings to the site.
Upon review of the noise measurements conducted of waste deliveries to site (as summarised in Table 8.7) it is concluded that the site is operating within the relevant EPA IPPC noise limits that are outlined in the licence.

The proposed increase in volume of waste that is to be handled by the facility is not envisaged to result in a significant change of this situation and therefore the associated noise impact is negligible.



Additional Vehicular Traffic on Public Roads

In terms of traffic, the increase in volume being processed at the site will result in a slight increase in traffic volumes on the local road network. Roughan & O'Donovan Consulting Engineers have provided predicted traffic flows associated with the expansion of the site operation. The supplied traffic flow values relate to two scenarios, as outlined below:

- Scenario 1 – AADT Flows for the Year 2023, Do Minimum (i.e. the development does not take place), and;
- Scenario 2 – AADT Flows for the Year 2023, Do Something.

In order to provide an assessment of any future potential increase in traffic noise, these traffic flow values have been used to determine the predicted change in noise levels adjacent to various roads in the vicinity of the site. The method for calculating the increase in noise is based upon the procedures within the UK Department of Transport, Welsh Office, *Calculation of Road Traffic Noise* (CRTN), 1988. Table 8.12 indicates resultant traffic flows and changes in noise levels associated with the site.

**Table 8.12 Changes in Road Traffic Noise Levels**

| Road | AADT Flows | | Change in Noise Level (dB(A)) |
|---|---|---|---|
| | Do Minimum (2023) | Do Something (2023) | |
| M1 Slip off ramp | 1,219 | 1,220 | 0.0 |
| R152 West of M1 Slip off ramp | 14,759 | 14,793 | 0.0 |
| R152 East of M1 Slip off ramp | 15,194 | 15,227 | 0.0 |
| R152 West of R150 | 11,059 | 11,076 | 0.0 |
| R152 East of R150 | 16,581 | 16,608 | 0.0 |
| R150 North of R152 | 9,340 | 9,350 | 0.0 |
| R150 South of R152 | 3,472 | 3,472 | 0.0 |

The increase in traffic noise levels along the roads assessed is less than 3dB(A) in all instances. Reference to Tables 8.8 confirms that this increase is negligible and the magnitude of change imperceptible. Resultant impacts can be considered not significant.

## 8.6 MITIGATION MEASURES

### 8.6.1 Construction Phase

With regard to construction activities, reference will be made to *BS5228: Noise control on construction and open sites*, which offers detailed guidance on the control of noise & vibration from demolition and construction activities. In particular, it is proposed that various practices be adopted during construction, including:

- limiting the hours during which site activities likely to create high levels of noise or vibration are permitted;
- establishing channels of communication between the contractor/developer, Local Authority and residents;
- appointing a site representative responsible for matters relating to noise and vibration;
- monitoring typical levels of noise and vibration during critical periods and at sensitive locations;
- keeping site access roads even so as to mitigate the potential for vibration from lorries.

Furthermore, it is envisaged that a variety of practicable noise control measures will be employed. These may include:

- selection of plant with low inherent potential for generation of noise and/ or vibration;
- erection of barriers as necessary around noisy processes and items such as generators heavy mechanical plant or high duty compressors;
- placing of noisy / vibratory plant as far away from sensitive properties as permitted by site constraints and the use of vibration isolated support structures where necessary.



### 8.6.2 Operational Phase

No additional noise or vibration mitigation measures are considered necessary in relation to the operation phase of the proposed development.

## 8.7 PREDICTED IMPACTS OF THE PROPOSED DEVELOPMENT

### 8.7.1 Construction Phase

During the construction phase of the project there will be some impact on nearby noise sensitive properties due to noise emissions from site traffic and other activities. However, given that the construction phase of the development is temporary in nature and the distances between the main construction works and nearby noise sensitive properties, it is expected that the various noise sources will not be excessively intrusive. Furthermore, the application of binding noise limits and hours of operation, along with implementation of appropriate noise and vibration control measures, will ensure that noise and vibration impact is kept to a minimum.

### 8.7.2 Operational Phase

It is expected that that activities on site will be controlled so as not to exceed typical EPA Waste Licence daytime and night-time criteria of 55dB and 45dB $L_{Aeq}$ respectively at the façade of nearby residential properties. The resultant noise impact from the proposed development on the local community is therefore not deemed to be significant.

# Appendix 8.1

# Unattended Baseline Noise Monitoring Results

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 06/08/2008 17:00 | 64 | 68 | 51 | 51 | 53 | 48 |
| 06/08/2008 18:00 | 63 | 67 | 50 | 48 | 51 | 42 |
| 06/08/2008 19:00 | 62 | 66 | 48 | 48 | 50 | 44 |
| 06/08/2008 20:00 | 61 | 66 | 48 | 49 | 53 | 43 |
| 06/08/2008 21:00 | 59 | 64 | 42 | 48 | 52 | 39 |
| 06/08/2008 22:00 | 58 | 63 | 39 | 46 | 46 | 36 |
| 06/08/2008 23:00 | 57 | 60 | 29 | 43 | 46 | 29 |
| 07/08/2008 00:00 | 54 | 56 | 26 | 39 | 43 | 27 |
| 07/08/2008 01:00 | 52 | 51 | 25 | 36 | 40 | 26 |
| 07/08/2008 02:00 | 52 | 46 | 25 | 34 | 38 | 24 |
| 07/08/2008 03:00 | 53 | 49 | 26 | 34 | 39 | 25 |
| 07/08/2008 04:00 | 56 | 56 | 28 | 34 | 38 | 25 |
| 07/08/2008 05:00 | 62 | 67 | 40 | 40 | 43 | 33 |
| 07/08/2008 06:00 | 64 | 69 | 49 | 46 | 45 | 39 |
| 07/08/2008 07:00 | 66 | 69 | 55 | 46 | 48 | 43 |
| 07/08/2008 08:00 | 65 | 69 | 52 | 49 | 49 | 45 |
| 07/08/2008 09:00 | 64 | 68 | 52 | 46 | 48 | 43 |
| 07/08/2008 10:00 | 64 | 68 | 50 | 49 | 48 | 43 |
| 07/08/2008 11:00 | 64 | 67 | 51 | 47 | 48 | 45 |
| 07/08/2008 12:00 | 64 | 68 | 51 | 49 | 49 | 44 |
| 07/08/2008 13:00 | 64 | 68 | 51 | 47 | 48 | 44 |
| 07/08/2008 14:00 | 63 | 67 | 52 | 49 | 51 | 45 |
| 07/08/2008 15:00 | 64 | 67 | 53 | 53 | 52 | 46 |
| 07/08/2008 16:00 | 65 | 68 | 56 | 50 | 52 | 47 |
| 07/08/2008 17:00 | 65 | 68 | 54 | 50 | 52 | 45 |
| 07/08/2008 18:00 | 64 | 67 | 53 | 49 | 52 | 45 |
| 07/08/2008 19:00 | 63 | 67 | 51 | 51 | 53 | 47 |
| 07/08/2008 20:00 | 62 | 66 | 48 | 49 | 51 | 45 |
| 07/08/2008 21:00 | 59 | 64 | 47 | 47 | 48 | 44 |
| 07/08/2008 22:00 | 58 | 62 | 45 | 45 | 48 | 42 |
| 07/08/2008 23:00 | 56 | 58 | 41 | 44 | 46 | 41 |
| 08/08/2008 00:00 | 55 | 54 | 40 | 43 | 46 | 40 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 08/08/2008 01:00 | 55 | 54 | 40 | 40 | 42 | 38 |
| 08/08/2008 02:00 | 55 | 54 | 40 | 41 | 43 | 38 |
| 08/08/2008 03:00 | 54 | 51 | 38 | 40 | 42 | 38 |
| 08/08/2008 04:00 | 57 | 57 | 39 | 39 | 41 | 37 |
| 08/08/2008 05:00 | 62 | 67 | 45 | 44 | 45 | 40 |
| 08/08/2008 06:00 | 65 | 69 | 50 | 48 | 49 | 43 |
| 08/08/2008 07:00 | 65 | 69 | 53 | 55 | 59 | 44 |
| 08/08/2008 08:00 | 64 | 68 | 48 | 56 | 60 | 42 |
| 08/08/2008 09:00 | 63 | 67 | 45 | 46 | 44 | 38 |
| 08/08/2008 10:00 | 63 | 67 | 47 | 42 | 44 | 38 |
| 08/08/2008 11:00 | 63 | 67 | 48 | 50 | 47 | 40 |
| 08/08/2008 12:00 | 64 | 68 | 49 | 57 | 49 | 40 |
| 08/08/2008 13:00 | 64 | 67 | 49 | 53 | 47 | 39 |
| 08/08/2008 14:00 | 64 | 68 | 51 | 45 | 45 | 39 |
| 08/08/2008 15:00 | 65 | 68 | 51 | 41 | 43 | 39 |
| 08/08/2008 16:00 | 64 | 68 | 51 | 42 | 43 | 39 |
| 08/08/2008 17:00 | 64 | 68 | 51 | 53 | 54 | 39 |
| 08/08/2008 18:00 | 63 | 67 | 48 | 52 | 55 | 40 |
| 08/08/2008 19:00 | 62 | 67 | 48 | 56 | 61 | 42 |
| 08/08/2008 20:00 | 62 | 67 | 50 | 55 | 58 | 45 |
| 08/08/2008 21:00 | 61 | 66 | 45 | 50 | 52 | 45 |
| 08/08/2008 22:00 | 59 | 64 | 42 | 47 | 50 | 42 |
| 08/08/2008 23:00 | 57 | 62 | 39 | 51 | 52 | 42 |
| 09/08/2008 00:00 | 56 | 60 | 33 | 45 | 48 | 34 |
| 09/08/2008 01:00 | 56 | 59 | 33 | 45 | 48 | 35 |
| 09/08/2008 02:00 | 56 | 59 | 29 | 42 | 46 | 32 |
| 09/08/2008 03:00 | 55 | 58 | 32 | 43 | 47 | 31 |
| 09/08/2008 04:00 | 54 | 55 | 30 | 44 | 48 | 33 |
| 09/08/2008 05:00 | 58 | 62 | 46 | 52 | 54 | 41 |
| 09/08/2008 06:00 | 61 | 65 | 40 | 49 | 52 | 42 |
| 09/08/2008 07:00 | 62 | 67 | 48 | 51 | 54 | 46 |
| 09/08/2008 08:00 | 63 | 67 | 48 | 49 | 52 | 45 |
| 09/08/2008 09:00 | 63 | 67 | 49 | 49 | 51 | 45 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 09/08/2008 10:00 | 63 | 67 | 52 | 48 | 51 | 45 |
| 09/08/2008 11:00 | 63 | 67 | 51 | 47 | 49 | 43 |
| 09/08/2008 12:00 | 63 | 67 | 50 | 45 | 48 | 40 |
| 09/08/2008 13:00 | 64 | 67 | 53 | 47 | 49 | 43 |
| 09/08/2008 14:00 | 63 | 67 | 52 | 46 | 49 | 42 |
| 09/08/2008 15:00 | 63 | 67 | 51 | 46 | 47 | 42 |
| 09/08/2008 16:00 | 63 | 67 | 49 | 45 | 47 | 41 |
| 09/08/2008 17:00 | 63 | 67 | 51 | 46 | 48 | 42 |
| 09/08/2008 18:00 | 62 | 67 | 47 | 49 | 52 | 43 |
| 09/08/2008 19:00 | 62 | 66 | 48 | 50 | 53 | 43 |
| 09/08/2008 20:00 | 61 | 65 | 47 | 50 | 54 | 44 |
| 09/08/2008 21:00 | 60 | 64 | 43 | 46 | 47 | 38 |
| 09/08/2008 22:00 | 59 | 64 | 42 | 43 | 46 | 38 |
| 09/08/2008 23:00 | 59 | 64 | 39 | 43 | 46 | 37 |
| 10/08/2008 00:00 | 58 | 62 | 36 | 42 | 45 | 34 |
| 10/08/2008 01:00 | 57 | 62 | 33 | 42 | 46 | 35 |
| 10/08/2008 02:00 | 56 | 61 | 31 | 42 | 46 | 31 |
| 10/08/2008 03:00 | 58 | 62 | 33 | 43 | 47 | 34 |
| 10/08/2008 04:00 | 54 | 55 | 29 | 42 | 47 | 31 |
| 10/08/2008 05:00 | 55 | 57 | 33 | 43 | 48 | 33 |
| 10/08/2008 06:00 | 57 | 61 | 37 | 46 | 50 | 39 |
| 10/08/2008 07:00 | 59 | 64 | 43 | 48 | 51 | 42 |
| 10/08/2008 08:00 | 59 | 63 | 46 | 50 | 53 | 45 |
| 10/08/2008 09:00 | 60 | 64 | 46 | 48 | 51 | 43 |
| 10/08/2008 10:00 | 61 | 65 | 49 | 51 | 54 | 45 |
| 10/08/2008 11:00 | 62 | 66 | 51 | 50 | 53 | 45 |
| 10/08/2008 12:00 | 62 | 66 | 52 | 49 | 52 | 45 |
| 10/08/2008 13:00 | 63 | 66 | 52 | 49 | 51 | 45 |
| 10/08/2008 14:00 | 63 | 67 | 53 | 50 | 53 | 47 |
| 10/08/2008 15:00 | 63 | 67 | 52 | 47 | 50 | 42 |
| 10/08/2008 16:00 | 63 | 67 | 53 | 49 | 50 | 44 |
| 10/08/2008 17:00 | 63 | 67 | 51 | 49 | 51 | 43 |
| 10/08/2008 18:00 | 63 | 67 | 52 | 47 | 50 | 43 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 10/08/2008 19:00 | 63 | 67 | 50 | 48 | 49 | 44 |
| 10/08/2008 20:00 | 61 | 66 | 46 | 48 | 50 | 42 |
| 10/08/2008 21:00 | 60 | 65 | 42 | 58 | 63 | 41 |
| 10/08/2008 22:00 | 58 | 63 | 43 | 47 | 50 | 42 |
| 10/08/2008 23:00 | 56 | 60 | 37 | 44 | 47 | 39 |
| 11/08/2008 00:00 | 54 | 57 | 36 | 41 | 45 | 36 |
| 11/08/2008 01:00 | 53 | 55 | 35 | 41 | 45 | 36 |
| 11/08/2008 02:00 | 53 | 50 | 33 | 39 | 43 | 34 |
| 11/08/2008 03:00 | 55 | 55 | 38 | 45 | 48 | 37 |
| 11/08/2008 04:00 | 56 | 58 | 37 | 42 | 45 | 36 |
| 11/08/2008 05:00 | 63 | 67 | 45 | 47 | 50 | 40 |
| 11/08/2008 06:00 | 66 | 69 | 52 | 50 | 52 | 44 |
| 11/08/2008 07:00 | 66 | 69 | 53 | 52 | 54 | 49 |
| 11/08/2008 08:00 | 65 | 69 | 54 | 52 | 54 | 49 |
| 11/08/2008 09:00 | 64 | 68 | 50 | 50 | 52 | 47 |
| 11/08/2008 10:00 | 64 | 68 | 52 | 51 | 53 | 46 |
| 11/08/2008 11:00 | 64 | 68 | 52 | 53 | 55 | 48 |
| 11/08/2008 12:00 | 64 | 68 | 51 | 52 | 54 | 48 |
| 11/08/2008 13:00 | 64 | 68 | 53 | 53 | 54 | 47 |
| 11/08/2008 14:00 | 65 | 69 | 55 | 52 | 54 | 48 |
| 11/08/2008 15:00 | 65 | 68 | 53 | 52 | 55 | 47 |
| 11/08/2008 16:00 | 66 | 69 | 56 | 53 | 55 | 49 |
| 11/08/2008 17:00 | 65 | 68 | 56 | 53 | 54 | 49 |
| 11/08/2008 18:00 | 64 | 68 | 51 | 50 | 52 | 46 |
| 11/08/2008 19:00 | 62 | 67 | 48 | 51 | 53 | 45 |
| 11/08/2008 20:00 | 60 | 65 | 45 | 47 | 50 | 42 |
| 11/08/2008 21:00 | 59 | 64 | 43 | 50 | 52 | 45 |
| 11/08/2008 22:00 | 57 | 61 | 43 | 49 | 52 | 45 |
| 11/08/2008 23:00 | 55 | 58 | 41 | 51 | 54 | 47 |
| 12/08/2008 00:00 | 55 | 56 | 38 | 48 | 51 | 42 |
| 12/08/2008 01:00 | 53 | 53 | 37 | 49 | 51 | 46 |
| 12/08/2008 02:00 | 52 | 47 | 30 | 41 | 44 | 32 |
| 12/08/2008 03:00 | 54 | 51 | 27 | 37 | 41 | 29 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 12/08/2008 04:00 | 57 | 59 | 27 | 38 | 42 | 27 |
| 12/08/2008 05:00 | 62 | 67 | 42 | 42 | 44 | 35 |
| 12/08/2008 06:00 | 65 | 69 | 50 | 47 | 48 | 41 |
| 12/08/2008 07:00 | 66 | 69 | 55 | 47 | 49 | 43 |
| 12/08/2008 08:00 | 65 | 69 | 53 | 47 | 46 | 41 |
| 12/08/2008 09:00 | 64 | 68 | 52 | 46 | 47 | 41 |
| 12/08/2008 10:00 | 64 | 68 | 52 | 57 | 60 | 42 |
| 12/08/2008 11:00 | 63 | 67 | 49 | 45 | 47 | 41 |
| 12/08/2008 12:00 | 63 | 67 | 50 | 44 | 45 | 39 |
| 12/08/2008 13:00 | 64 | 67 | 53 | 45 | 47 | 40 |
| 12/08/2008 14:00 | 64 | 68 | 54 | 55 | 51 | 44 |
| 12/08/2008 15:00 | 65 | 69 | 57 | 52 | 54 | 47 |
| 12/08/2008 16:00 | 66 | 69 | 59 | 52 | 54 | 50 |
| 12/08/2008 17:00 | 66 | 69 | 59 | 51 | 52 | 48 |
| 12/08/2008 18:00 | 64 | 68 | 52 | 51 | 50 | 45 |
| 12/08/2008 19:00 | 63 | 67 | 49 | 47 | 49 | 44 |
| 12/08/2008 20:00 | 61 | 66 | 47 | 49 | 51 | 45 |
| 12/08/2008 21:00 | 60 | 65 | 43 | 46 | 49 | 40 |
| 12/08/2008 22:00 | 59 | 63 | 40 | 43 | 46 | 37 |
| 12/08/2008 23:00 | 56 | 59 | 32 | 42 | 46 | 33 |
| 13/08/2008 00:00 | 56 | 57 | 30 | 41 | 45 | 30 |
| 13/08/2008 01:00 | 52 | 50 | 27 | 40 | 44 | 26 |
| 13/08/2008 02:00 | 52 | 48 | 31 | 36 | 40 | 27 |
| 13/08/2008 03:00 | 54 | 54 | 34 | 38 | 42 | 31 |
| 13/08/2008 04:00 | 58 | 59 | 35 | 41 | 45 | 32 |
| 13/08/2008 05:00 | 63 | 68 | 47 | 48 | 51 | 37 |
| 13/08/2008 06:00 | 65 | 70 | 52 | 50 | 52 | 45 |
| 13/08/2008 07:00 | 66 | 69 | 53 | 47 | 48 | 45 |
| 13/08/2008 08:00 | 64 | 68 | 51 | 47 | 47 | 43 |
| 13/08/2008 09:00 | 64 | 68 | 52 | 49 | 50 | 41 |
| 13/08/2008 10:00 | 63 | 68 | 50 | 56 | 60 | 42 |
| 13/08/2008 11:00 | 63 | 67 | 48 | 55 | 56 | 40 |
| 13/08/2008 12:00 | 63 | 67 | 49 | 43 | 44 | 40 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 13/08/2008 13:00 | 64 | 68 | 52 | 45 | 45 | 39 |
| 13/08/2008 14:00 | 64 | 67 | 52 | 44 | 46 | 41 |
| 13/08/2008 15:00 | 64 | 67 | 52 | 45 | 46 | 41 |
| 13/08/2008 16:00 | 65 | 68 | 54 | 49 | 51 | 45 |
| 13/08/2008 17:00 | 65 | 68 | 56 | 55 | 55 | 46 |
| 13/08/2008 18:00 | 64 | 68 | 55 | 53 | 54 | 49 |
| 13/08/2008 19:00 | 63 | 67 | 50 | 51 | 54 | 46 |
| 13/08/2008 20:00 | 61 | 66 | 49 | 49 | 52 | 46 |
| 13/08/2008 21:00 | 60 | 65 | 45 | 47 | 49 | 42 |
| 13/08/2008 22:00 | 59 | 63 | 39 | 43 | 46 | 38 |
| 13/08/2008 23:00 | 57 | 61 | 33 | 42 | 45 | 34 |
| 14/08/2008 00:00 | 56 | 58 | 33 | 41 | 44 | 33 |
| 14/08/2008 01:00 | 54 | 56 | 32 | 39 | 42 | 32 |
| 14/08/2008 02:00 | 54 | 53 | 32 | 40 | 43 | 32 |
| 14/08/2008 03:00 | 54 | 52 | 30 | 39 | 43 | 30 |
| 14/08/2008 04:00 | 57 | 60 | 31 | 39 | 43 | 30 |
| 14/08/2008 05:00 | 63 | 68 | 43 | 46 | 49 | 35 |
| 14/08/2008 06:00 | 66 | 70 | 53 | 52 | 54 | 45 |
| 14/08/2008 07:00 | 66 | 70 | 57 | 52 | 53 | 48 |
| 14/08/2008 08:00 | 65 | 69 | 54 | 50 | 52 | 46 |
| 14/08/2008 09:00 | 64 | 68 | 51 | 54 | 57 | 45 |
| 14/08/2008 10:00 | 64 | 68 | 52 | 47 | 49 | 43 |
| 14/08/2008 11:00 | 64 | 68 | 51 | 47 | 49 | 44 |
| 14/08/2008 12:00 | 64 | 68 | 51 | 46 | 48 | 43 |
| 14/08/2008 13:00 | 64 | 67 | 52 | | | |
| 14/08/2008 14:00 | 63 | 67 | 50 | | | |
| 14/08/2008 15:00 | 64 | 68 | 52 | | | |
| 14/08/2008 16:00 | 64 | 68 | 52 | | | |
| 14/08/2008 17:00 | 64 | 68 | 53 | | | |
| 14/08/2008 18:00 | 63 | 67 | 51 | 46 | 47 | 41 |
| 14/08/2008 19:00 | 63 | 67 | 48 | 53 | 53 | 42 |
| 14/08/2008 20:00 | 62 | 67 | 49 | 56 | 60 | 41 |
| 14/08/2008 21:00 | 60 | 65 | 46 | 56 | 60 | 45 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 14/08/2008 22:00 | 59 | 63 | 40 | 56 | 59 | 44 |
| 14/08/2008 23:00 | 57 | 60 | 32 | 47 | 49 | 40 |
| 15/08/2008 00:00 | 57 | 59 | 30 | 45 | 49 | 34 |
| 15/08/2008 01:00 | 53 | 53 | 26 | 43 | 47 | 30 |
| 15/08/2008 02:00 | 55 | 56 | 27 | 42 | 46 | 27 |
| 15/08/2008 03:00 | 55 | 55 | 26 | 38 | 43 | 26 |
| 15/08/2008 04:00 | 59 | 62 | 34 | 39 | 43 | 26 |
| 15/08/2008 05:00 | 64 | 68 | 46 | 43 | 45 | 28 |
| 15/08/2008 06:00 | 66 | 70 | 56 | 47 | 49 | 37 |
| 15/08/2008 07:00 | 66 | 69 | 56 | 50 | 52 | 45 |
| 15/08/2008 08:00 | 65 | 68 | 51 | 50 | 52 | 47 |
| 15/08/2008 09:00 | 64 | 68 | 51 | 50 | 52 | 46 |
| 15/08/2008 10:00 | 64 | 68 | 52 | 53 | 54 | 45 |
| 15/08/2008 11:00 | 64 | 68 | 51 | 49 | 51 | 45 |
| 15/08/2008 12:00 | 65 | 68 | 53 | 50 | 52 | 45 |
| 15/08/2008 13:00 | 65 | 68 | 53 | 49 | 51 | 46 |
| 15/08/2008 14:00 | 65 | 68 | 55 | 58 | 54 | 47 |
| 15/08/2008 15:00 | 65 | 69 | 56 | 50 | 52 | 46 |
| 15/08/2008 16:00 | 65 | 69 | 56 | 51 | 53 | 47 |
| 15/08/2008 17:00 | 65 | 68 | 55 | 51 | 53 | 48 |
| 15/08/2008 18:00 | 64 | 67 | 51 | 52 | 54 | 49 |
| 15/08/2008 19:00 | 63 | 67 | 49 | 51 | 54 | 47 |
| 15/08/2008 20:00 | 61 | 66 | 45 | 51 | 54 | 46 |
| 15/08/2008 21:00 | 60 | 65 | 42 | 51 | 54 | 47 |
| 15/08/2008 22:00 | 59 | 64 | 40 | 52 | 55 | 44 |
| 15/08/2008 23:00 | 57 | 60 | 35 | 47 | 50 | 39 |
| 16/08/2008 00:00 | 57 | 61 | 33 | 46 | 49 | 37 |
| 16/08/2008 01:00 | 56 | 59 | 36 | 46 | 50 | 36 |
| 16/08/2008 02:00 | 56 | 60 | 40 | 46 | 49 | 37 |
| 16/08/2008 03:00 | 56 | 59 | 41 | 48 | 51 | 40 |
| 16/08/2008 04:00 | 56 | 59 | 44 | 49 | 52 | 43 |
| 16/08/2008 05:00 | 60 | 65 | 46 | 52 | 55 | 46 |
| 16/08/2008 06:00 | 62 | 67 | 49 | 53 | 56 | 48 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 16/08/2008 07:00 | 63 | 67 | 50 | 55 | 58 | 50 |
| 16/08/2008 08:00 | 63 | 67 | 51 | 55 | 58 | 50 |
| 16/08/2008 09:00 | 64 | 68 | 53 | 55 | 58 | 50 |
| 16/08/2008 10:00 | 65 | 68 | 54 | 57 | 59 | 53 |
| 16/08/2008 11:00 | 65 | 68 | 57 | 58 | 60 | 53 |
| 16/08/2008 12:00 | 66 | 69 | 57 | 58 | 60 | 54 |
| 16/08/2008 13:00 | 65 | 68 | 56 | 59 | 61 | 56 |
| 16/08/2008 14:00 | 64 | 68 | 53 | 59 | 61 | 56 |
| 16/08/2008 15:00 | 63 | 67 | 47 | 58 | 61 | 55 |
| 16/08/2008 16:00 | 63 | 67 | 44 | 50 | 52 | 45 |
| 16/08/2008 17:00 | 63 | 68 | 45 | 48 | 51 | 41 |
| 16/08/2008 18:00 | 62 | 67 | 49 | 46 | 48 | 40 |
| 16/08/2008 19:00 | 62 | 67 | 48 | 52 | 53 | 43 |
| 16/08/2008 20:00 | 61 | 66 | 44 | 48 | 50 | 44 |
| 16/08/2008 21:00 | 60 | 65 | 43 | 48 | 51 | 43 |
| 16/08/2008 22:00 | 59 | 64 | 39 | 54 | 57 | 42 |
| 16/08/2008 23:00 | 57 | 61 | 36 | 48 | 51 | 40 |
| 17/08/2008 00:00 | 73 | 36 | 36 | 47 | 50 | 37 |
| 17/08/2008 01:00 | 56 | 60 | 33 | 46 | 50 | 37 |
| 17/08/2008 02:00 | 56 | 60 | 33 | 46 | 49 | 39 |
| 17/08/2008 03:00 | 73 | 33 | 33 | 44 | 47 | 37 |
| 17/08/2008 04:00 | 54 | 54 | 34 | 41 | 44 | 36 |
| 17/08/2008 05:00 | 55 | 58 | 34 | 36 | 38 | 31 |
| 17/08/2008 06:00 | 57 | 61 | 36 | 43 | 43 | 34 |
| 17/08/2008 07:00 | 58 | 61 | 36 | 44 | 46 | 34 |
| 17/08/2008 08:00 | 58 | 62 | 37 | 52 | 55 | 36 |
| 17/08/2008 09:00 | 60 | 65 | 41 | 56 | 60 | 38 |
| 17/08/2008 10:00 | 62 | 66 | 47 | 45 | 46 | 35 |
| 17/08/2008 11:00 | 62 | 66 | 48 | 46 | 48 | 39 |
| 17/08/2008 12:00 | 63 | 67 | 50 | 47 | 49 | 42 |
| 17/08/2008 13:00 | 64 | 67 | 51 | 49 | 51 | 43 |
| 17/08/2008 14:00 | 63 | 67 | 50 | 49 | 52 | 46 |
| 17/08/2008 15:00 | 64 | 68 | 52 | 50 | 53 | 46 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 17/08/2008 16:00 | 63 | 67 | 51 | 51 | 53 | 47 |
| 17/08/2008 17:00 | 64 | 68 | 53 | 52 | 53 | 47 |
| 17/08/2008 18:00 | 62 | 67 | 47 | 52 | 55 | 49 |
| 17/08/2008 19:00 | 62 | 67 | 48 | 53 | 55 | 49 |
| 17/08/2008 20:00 | 61 | 65 | 45 | 53 | 56 | 49 |
| 17/08/2008 21:00 | 58 | 63 | 40 | 52 | 55 | 48 |
| 17/08/2008 22:00 | 58 | 62 | 44 | 51 | 54 | 45 |
| 17/08/2008 23:00 | 56 | 60 | 39 | 50 | 53 | 43 |
| 18/08/2008 00:00 | 54 | 56 | 33 | 53 | 55 | 46 |
| 18/08/2008 01:00 | 52 | 51 | 26 | 47 | 51 | 39 |
| 18/08/2008 02:00 | 54 | 54 | 25 | 45 | 49 | 34 |
| 18/08/2008 03:00 | 53 | 53 | 25 | 41 | 45 | 28 |
| 18/08/2008 04:00 | 59 | 62 | 33 | 39 | 44 | 25 |
| 18/08/2008 05:00 | 63 | 68 | 45 | 41 | 46 | 25 |
| 18/08/2008 06:00 | 66 | 69 | 55 | 49 | 52 | 38 |
| 18/08/2008 07:00 | 66 | 69 | 55 | 54 | 57 | 49 |
| 18/08/2008 08:00 | 65 | 69 | 52 | 55 | 57 | 53 |
| 18/08/2008 09:00 | 64 | 68 | 49 | 55 | 57 | 52 |
| 18/08/2008 10:00 | 65 | 69 | 51 | 56 | 58 | 52 |
| 18/08/2008 11:00 | 64 | 68 | 52 | 56 | 58 | 52 |
| 18/08/2008 12:00 | 64 | 68 | 50 | 58 | 59 | 53 |
| 18/08/2008 13:00 | 63 | 67 | 51 | 56 | 57 | 51 |
| 18/08/2008 14:00 | 64 | 67 | 52 | 55 | 57 | 52 |
| 18/08/2008 15:00 | 64 | 68 | 51 | 55 | 57 | 51 |
| 18/08/2008 16:00 | 65 | 68 | 53 | 55 | 57 | 52 |
| 18/08/2008 17:00 | 64 | 68 | 51 | 55 | 57 | 51 |
| 18/08/2008 18:00 | 63 | 67 | 47 | 57 | 59 | 53 |
| 18/08/2008 19:00 | 62 | 66 | 48 | 54 | 56 | 49 |
| 18/08/2008 20:00 | 60 | 65 | 47 | 51 | 53 | 47 |
| 18/08/2008 21:00 | 59 | 63 | 45 | 49 | 51 | 46 |
| 18/08/2008 22:00 | 57 | 60 | 44 | 49 | 50 | 46 |
| 18/08/2008 23:00 | 55 | 57 | 40 | 49 | 51 | 45 |
| 19/08/2008 00:00 | 53 | 49 | 38 | 46 | 49 | 43 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 19/08/2008 01:00 | 53 | 49 | 37 | 43 | 46 | 40 |
| 19/08/2008 02:00 | 52 | 49 | 37 | 41 | 43 | 38 |
| 19/08/2008 03:00 | 53 | 52 | 36 | | | |
| 19/08/2008 04:00 | 59 | 62 | 39 | | | |
| 19/08/2008 05:00 | 63 | 68 | 46 | | | |
| 19/08/2008 06:00 | 66 | 69 | 54 | | | |
| 19/08/2008 07:00 | 65 | 69 | 54 | | | |

Appendix 8.2

Unattended Commissioning Noise Monitoring Results

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 11/11/2011 10:00 | 63 | 67 | 50 | 56 | 58 | 52 |
| 11/11/2011 11:00 | 64 | 68 | 53 | 56 | 58 | 53 |
| 11/11/2011 12:00 | 65 | 69 | 53 | 58 | 60 | 54 |
| 11/11/2011 13:00 | 65 | 68 | 53 | 57 | 59 | 54 |
| 11/11/2011 14:00 | 65 | 69 | 55 | 57 | 59 | 54 |
| 11/11/2011 15:00 | 65 | 69 | 53 | 55 | 57 | 53 |
| 11/11/2011 16:00 | 65 | 69 | 55 | 54 | 56 | 51 |
| 11/11/2011 17:00 | 64 | 67 | 54 | 55 | 57 | 52 |
| 11/11/2011 18:00 | 63 | 68 | 51 | 53 | 55 | 51 |
| 11/11/2011 19:00 | 62 | 67 | 49 | 51 | 54 | 48 |
| 11/11/2011 20:00 | 60 | 65 | 46 | 50 | 53 | 45 |
| 11/11/2011 21:00 | 59 | 64 | 43 | 49 | 51 | 43 |
| 11/11/2011 22:00 | 58 | 62 | 41 | 48 | 51 | 42 |
| 11/11/2011 23:00 | 57 | 61 | 38 | 46 | 50 | 41 |
| 11/11/2011 00:00 | 54 | 56 | 34 | 44 | 47 | 38 |
| 12/11/2011 01:00 | 54 | 56 | 34 | 43 | 46 | 38 |
| 12/11/2011 02:00 | 54 | 55 | 35 | 44 | 47 | 39 |
| 12/11/2011 03:00 | 54 | 55 | 34 | 43 | 46 | 40 |
| 12/11/2011 04:00 | 53 | 54 | 33 | 44 | 47 | 39 |
| 12/11/2011 05:00 | 54 | 54 | 35 | 44 | 47 | 38 |
| 12/11/2011 06:00 | 57 | 60 | 38 | 45 | 49 | 39 |
| 12/11/2011 07:00 | 59 | 63 | 43 | 49 | 52 | 42 |
| 12/11/2011 08:00 | 61 | 65 | 47 | 52 | 55 | 48 |
| 12/11/2011 09:00 | 61 | 65 | 48 | 53 | 55 | 47 |
| 12/11/2011 10:00 | 61 | 66 | 47 | 52 | 54 | 47 |
| 12/11/2011 11:00 | 62 | 67 | 49 | 52 | 56 | 46 |
| 12/11/2011 12:00 | 62 | 67 | 49 | 53 | 53 | 48 |
| 12/11/2011 13:00 | 62 | 67 | 46 | 51 | 53 | 45 |
| 12/11/2011 14:00 | 62 | 67 | 48 | 51 | 53 | 45 |
| 12/11/2011 15:00 | 62 | 67 | 47 | 53 | 54 | 44 |
| 12/11/2011 16:00 | 62 | 67 | 50 | 54 | 56 | 48 |
| 12/11/2011 17:00 | 62 | 66 | 50 | 55 | 55 | 48 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 12/11/2011 18:00 | 62 | 66 | 50 | 51 | 52 | 46 |
| 12/11/2011 19:00 | 60 | 65 | 46 | 48 | 50 | 45 |
| 12/11/2011 20:00 | 59 | 64 | 45 | 48 | 50 | 44 |
| 12/11/2011 21:00 | 58 | 63 | 44 | 46 | 48 | 43 |
| 12/11/2011 22:00 | 57 | 61 | 43 | 45 | 48 | 42 |
| 12/11/2011 23:00 | 56 | 60 | 43 | 44 | 46 | 42 |
| 12/11/2011 00:00 | 55 | 58 | 43 | 45 | 47 | 43 |
| 13/11/2011 01:00 | 54 | 58 | 42 | 45 | 47 | 43 |
| 13/11/2011 02:00 | 54 | 56 | 42 | 44 | 46 | 43 |
| 13/11/2011 03:00 | 54 | 56 | 41 | 44 | 46 | 42 |
| 13/11/2011 04:00 | 52 | 51 | 40 | 44 | 45 | 42 |
| 13/11/2011 05:00 | 54 | 53 | 40 | 46 | 48 | 42 |
| 13/11/2011 06:00 | 54 | 54 | 41 | 46 | 48 | 43 |
| 13/11/2011 07:00 | 57 | 59 | 43 | 46 | 48 | 43 |
| 13/11/2011 08:00 | 57 | 60 | 43 | 49 | 52 | 44 |
| 13/11/2011 09:00 | 58 | 63 | 44 | 48 | 51 | 44 |
| 13/11/2011 10:00 | 61 | 65 | 46 | 49 | 51 | 45 |
| 13/11/2011 11:00 | 61 | 65 | 47 | 50 | 53 | 47 |
| 13/11/2011 12:00 | 62 | 67 | 50 | 52 | 55 | 49 |
| 13/11/2011 13:00 | 63 | 67 | 52 | 53 | 55 | 49 |
| 13/11/2011 14:00 | 63 | 67 | 51 | 52 | 54 | 50 |
| 13/11/2011 15:00 | 63 | 67 | 51 | 52 | 54 | 49 |
| 13/11/2011 16:00 | 63 | 67 | 51 | 52 | 55 | 49 |
| 13/11/2011 17:00 | 62 | 66 | 50 | 50 | 52 | 48 |
| 13/11/2011 18:00 | 61 | 66 | 49 | 50 | 52 | 47 |
| 13/11/2011 19:00 | 60 | 65 | 48 | 49 | 52 | 46 |
| 13/11/2011 20:00 | 59 | 64 | 46 | 48 | 51 | 45 |
| 13/11/2011 21:00 | 57 | 62 | 45 | 46 | 48 | 43 |
| 13/11/2011 22:00 | 56 | 60 | 44 | 46 | 47 | 43 |
| 13/11/2011 23:00 | 54 | 55 | 39 | 44 | 46 | 42 |
| 13/11/2011 00:00 | 52 | 53 | 38 | 42 | 44 | 40 |
| 14/11/2011 01:00 | 49 | 48 | 35 | 40 | 42 | 38 |
| 14/11/2011 02:00 | 46 | 40 | 35 | 40 | 41 | 38 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 14/11/2011 03:00 | 51 | 47 | 38 | 40 | 42 | 39 |
| 14/11/2011 04:00 | 53 | 51 | 40 | 43 | 45 | 40 |
| 14/11/2011 05:00 | 57 | 59 | 42 | 44 | 46 | 42 |
| 14/11/2011 06:00 | 60 | 65 | 45 | 47 | 49 | 43 |
| 14/11/2011 07:00 | 64 | 68 | 51 | 50 | 53 | 46 |
| 14/11/2011 08:00 | 65 | 69 | 55 | 54 | 57 | 48 |
| 14/11/2011 09:00 | 64 | 68 | 53 | 54 | 56 | 50 |
| 14/11/2011 10:00 | 63 | 67 | 50 | 52 | 54 | 48 |
| 14/11/2011 11:00 | 62 | 66 | 48 | 51 | 53 | 48 |
| 14/11/2011 12:00 | 63 | 67 | 50 | 54 | 57 | 50 |
| 14/11/2011 13:00 | 63 | 67 | 51 | 55 | 57 | 51 |
| 14/11/2011 14:00 | 62 | 66 | 51 | 54 | 56 | 50 |
| 14/11/2011 15:00 | 63 | 67 | 53 | 53 | 55 | 50 |
| 14/11/2011 16:00 | 63 | 67 | 53 | 55 | 57 | 51 |
| 14/11/2011 17:00 | 63 | 67 | 54 | 52 | 54 | 49 |
| 14/11/2011 18:00 | 63 | 66 | 52 | 52 | 55 | 49 |
| 14/11/2011 19:00 | 60 | 65 | 48 | 50 | 52 | 47 |
| 14/11/2011 20:00 | 59 | 64 | 45 | 48 | 50 | 45 |
| 14/11/2011 21:00 | 58 | 63 | 43 | 46 | 48 | 42 |
| 14/11/2011 22:00 | 56 | 59 | 41 | 44 | 47 | 42 |
| 14/11/2011 23:00 | 54 | 56 | 42 | 43 | 45 | 41 |
| 14/11/2011 00:00 | 51 | 51 | 42 | 43 | 44 | 41 |
| 15/11/2011 01:00 | 50 | 47 | 41 | 42 | 44 | 41 |
| 15/11/2011 02:00 | 49 | 44 | 40 | 41 | 43 | 40 |
| 15/11/2011 03:00 | 51 | 46 | 41 | 41 | 42 | 40 |
| 15/11/2011 04:00 | 52 | 49 | 41 | 43 | 44 | 40 |
| 15/11/2011 05:00 | 55 | 56 | 42 | 43 | 45 | 41 |
| 15/11/2011 06:00 | 60 | 64 | 45 | 46 | 47 | 42 |
| 15/11/2011 07:00 | 63 | 67 | 50 | 48 | 50 | 45 |
| 15/11/2011 08:00 | 64 | 67 | 53 | 54 | 57 | 48 |
| 15/11/2011 09:00 | 63 | 67 | 51 | 52 | 54 | 49 |
| 15/11/2011 10:00 | 61 | 66 | 47 | 51 | 53 | 49 |
| 15/11/2011 11:00 | 61 | 66 | 46 | 53 | 55 | 49 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 15/11/2011 12:00 | 61 | 66 | 46 | 51 | 54 | 48 |
| 15/11/2011 13:00 | 62 | 66 | 51 | 53 | 56 | 49 |
| 15/11/2011 14:00 | 62 | 66 | 51 | 56 | 59 | 50 |
| 15/11/2011 15:00 | 63 | 67 | 52 | 56 | 60 | 49 |
| 15/11/2011 16:00 | 63 | 67 | 53 | 55 | 58 | 49 |
| 15/11/2011 17:00 | 63 | 66 | 54 | 51 | 51 | 48 |
| 15/11/2011 18:00 | 62 | 66 | 51 | 50 | 51 | 48 |
| 15/11/2011 19:00 | 61 | 65 | 48 | 48 | 50 | 46 |
| 15/11/2011 20:00 | 59 | 64 | 45 | 47 | 49 | 44 |
| 15/11/2011 21:00 | 58 | 63 | 43 | 45 | 47 | 43 |
| 15/11/2011 22:00 | 57 | 61 | 42 | 46 | 48 | 42 |
| 15/11/2011 23:00 | 55 | 58 | 42 | 44 | 46 | 41 |
| 15/11/2011 00:00 | 54 | 55 | 40 | 44 | 47 | 40 |
| 16/11/2011 01:00 | 51 | 47 | 40 | 42 | 44 | 40 |
| 16/11/2011 02:00 | 47 | 43 | 39 | 41 | 43 | 39 |
| 16/11/2011 03:00 | 50 | 44 | 40 | 41 | 43 | 39 |
| 16/11/2011 04:00 | 53 | 50 | 40 | 42 | 44 | 40 |
| 16/11/2011 05:00 | 56 | 58 | 42 | 44 | 47 | 40 |
| 16/11/2011 06:00 | 60 | 64 | 44 | 47 | 49 | 42 |
| 16/11/2011 07:00 | 63 | 67 | 49 | 49 | 51 | 46 |
| 16/11/2011 08:00 | 65 | 69 | 53 | 54 | 57 | 49 |
| 16/11/2011 09:00 | 63 | 68 | 49 | 55 | 58 | 51 |
| 16/11/2011 10:00 | 63 | 67 | 48 | 56 | 60 | 49 |
| 16/11/2011 11:00 | 63 | 67 | 47 | 57 | 59 | 49 |
| 16/11/2011 12:00 | 62 | 67 | 48 | 53 | 55 | 49 |
| 16/11/2011 13:00 | 62 | 67 | 48 | 52 | 54 | 49 |
| 16/11/2011 14:00 | 62 | 67 | 48 | 52 | 54 | 47 |
| 16/11/2011 15:00 | 63 | 67 | 50 | 53 | 55 | 50 |
| 16/11/2011 16:00 | 64 | 67 | 53 | 53 | 55 | 50 |
| 16/11/2011 17:00 | 64 | 67 | 53 | 53 | 54 | 50 |
| 16/11/2011 18:00 | 63 | 66 | 50 | 50 | 52 | 46 |
| 16/11/2011 19:00 | 62 | 66 | 47 | 48 | 50 | 44 |
| 16/11/2011 20:00 | 60 | 65 | 45 | 47 | 50 | 44 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 16/11/2011 21:00 | 59 | 63 | 44 | 46 | 48 | 43 |
| 16/11/2011 22:00 | 58 | 63 | 44 | 46 | 49 | 44 |
| 16/11/2011 23:00 | 56 | 59 | 43 | 48 | 49 | 46 |
| 16/11/2011 00:00 | 53 | 52 | 40 | 47 | 47 | 42 |
| 17/11/2011 01:00 | 49 | 48 | 38 | 42 | 43 | 40 |
| 17/11/2011 02:00 | 49 | 43 | 36 | 42 | 43 | 40 |
| 17/11/2011 03:00 | 49 | 45 | 36 | 43 | 45 | 41 |
| 17/11/2011 04:00 | 54 | 52 | 36 | 45 | 48 | 42 |
| 17/11/2011 05:00 | 58 | 60 | 37 | 47 | 50 | 44 |
| 17/11/2011 06:00 | 62 | 66 | 44 | 50 | 53 | 45 |
| 17/11/2011 07:00 | 65 | 69 | 53 | 53 | 55 | 49 |
| 17/11/2011 08:00 | 66 | 69 | 56 | 56 | 58 | 53 |
| 17/11/2011 09:00 | 64 | 68 | 53 | 57 | 58 | 53 |
| 17/11/2011 10:00 | 63 | 67 | 49 | 56 | 59 | 52 |
| 17/11/2011 11:00 | 64 | 68 | 51 | 55 | 57 | 52 |
| 17/11/2011 12:00 | 65 | 68 | 52 | 57 | 60 | 52 |
| 17/11/2011 13:00 | 66 | 70 | 55 | 58 | 60 | 54 |
| 17/11/2011 14:00 | 67 | 70 | 57 | 59 | 61 | 56 |
| 17/11/2011 15:00 | 66 | 70 | 57 | 60 | 62 | 57 |
| 17/11/2011 16:00 | 66 | 69 | 57 | 59 | 61 | 56 |
| 17/11/2011 17:00 | 65 | 68 | 57 | 58 | 61 | 55 |
| 17/11/2011 18:00 | 65 | 68 | 55 | 58 | 60 | 55 |
| 17/11/2011 19:00 | 63 | 67 | 53 | 58 | 60 | 55 |
| 17/11/2011 20:00 | 62 | 66 | 52 | 57 | 59 | 54 |
| 17/11/2011 21:00 | 61 | 65 | 50 | 57 | 59 | 54 |
| 17/11/2011 22:00 | 60 | 64 | 49 | 57 | 59 | 53 |
| 17/11/2011 23:00 | 58 | 62 | 46 | 55 | 58 | 52 |
| 17/11/2011 00:00 | 55 | 58 | 43 | 55 | 57 | 51 |
| 18/11/2011 01:00 | 52 | 53 | 42 | 54 | 56 | 51 |
| 18/11/2011 02:00 | 53 | 53 | 41 | 55 | 57 | 51 |
| 18/11/2011 03:00 | 51 | 50 | 40 | 54 | 56 | 51 |
| 18/11/2011 04:00 | 53 | 52 | 39 | 54 | 56 | 51 |
| 18/11/2011 05:00 | 56 | 59 | 41 | 54 | 57 | 51 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 18/11/2011 06:00 | 60 | 65 | 45 | 55 | 57 | 52 |
| 18/11/2011 07:00 | 63 | 67 | 50 | 56 | 58 | 53 |
| 18/11/2011 08:00 | 65 | 69 | 55 | 58 | 60 | 55 |
| 18/11/2011 09:00 | 63 | 67 | 53 | 58 | 60 | 54 |
| 18/11/2011 10:00 | 62 | 67 | 50 | 57 | 59 | 54 |
| 18/11/2011 11:00 | 63 | 67 | 52 | 59 | 62 | 54 |
| 18/11/2011 12:00 | 63 | 67 | 52 | 58 | 61 | 55 |
| 18/11/2011 13:00 | 63 | 67 | 51 | 59 | 61 | 55 |
| 18/11/2011 14:00 | 64 | 67 | 53 | 58 | 60 | 55 |
| 18/11/2011 15:00 | 63 | 67 | 52 | 57 | 59 | 54 |
| 18/11/2011 16:00 | 63 | 66 | 53 | 57 | 59 | 54 |
| 18/11/2011 17:00 | 62 | 66 | 51 | 58 | 60 | 55 |
| 18/11/2011 18:00 | 62 | 66 | 48 | 56 | 59 | 54 |
| 18/11/2011 19:00 | 62 | 66 | 49 | 56 | 59 | 53 |
| 18/11/2011 20:00 | 61 | 65 | 46 | 57 | 59 | 53 |
| 18/11/2011 21:00 | 59 | 64 | 44 | 56 | 59 | 52 |
| 18/11/2011 22:00 | 58 | 62 | 42 | 56 | 58 | 53 |
| 18/11/2011 23:00 | 56 | 60 | 40 | 56 | 59 | 51 |
| 18/11/2011 00:00 | 55 | 59 | 39 | 56 | 59 | 51 |
| 19/11/2011 01:00 | 55 | 58 | 39 | 55 | 58 | 52 |
| 19/11/2011 02:00 | 52 | 53 | 38 | 55 | 58 | 52 |
| 19/11/2011 03:00 | 54 | 56 | 39 | 55 | 58 | 52 |
| 19/11/2011 04:00 | 51 | 51 | 38 | 55 | 57 | 52 |
| 19/11/2011 05:00 | 54 | 53 | 38 | 55 | 57 | 51 |
| 19/11/2011 06:00 | 57 | 60 | 40 | 55 | 57 | 51 |
| 19/11/2011 07:00 | 58 | 63 | 42 | 56 | 58 | 51 |
| 19/11/2011 08:00 | 60 | 64 | 44 | 57 | 59 | 53 |
| 19/11/2011 09:00 | 61 | 66 | 46 | 54 | 56 | 49 |
| 19/11/2011 10:00 | 61 | 66 | 46 | 53 | 56 | 49 |
| 19/11/2011 11:00 | 62 | 66 | 48 | 54 | 55 | 50 |
| 19/11/2011 12:00 | 63 | 67 | 49 | 57 | 59 | 52 |
| 19/11/2011 13:00 | 62 | 66 | 48 | 56 | 59 | 53 |
| 19/11/2011 14:00 | 62 | 66 | 48 | 61 | 64 | 51 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 19/11/2011 15:00 | 62 | 66 | 48 | 55 | 57 | 51 |
| 19/11/2011 16:00 | 62 | 66 | 49 | 56 | 57 | 54 |
| 19/11/2011 17:00 | 61 | 65 | 47 | 56 | 57 | 54 |
| 19/11/2011 18:00 | 60 | 65 | 46 | 55 | 57 | 53 |
| 19/11/2011 19:00 | 59 | 64 | 43 | 57 | 59 | 54 |
| 19/11/2011 20:00 | 58 | 63 | 43 | 55 | 57 | 53 |
| 19/11/2011 21:00 | 57 | 61 | 42 | 53 | 55 | 51 |
| 19/11/2011 22:00 | 56 | 60 | 41 | 54 | 56 | 52 |
| 19/11/2011 23:00 | 55 | 59 | 41 | 52 | 54 | 51 |
| 19/11/2011 00:00 | 55 | 58 | 42 | 52 | 54 | 50 |
| 20/11/2011 01:00 | 53 | 55 | 43 | 52 | 53 | 50 |
| 20/11/2011 02:00 | 54 | 56 | 44 | 51 | 52 | 50 |
| 20/11/2011 03:00 | 55 | 57 | 44 | 52 | 53 | 51 |
| 20/11/2011 04:00 | 53 | 53 | 43 | 53 | 54 | 51 |
| 20/11/2011 05:00 | 53 | 51 | 45 | 54 | 54 | 52 |
| 20/11/2011 06:00 | 54 | 54 | 45 | 53 | 54 | 52 |
| 20/11/2011 07:00 | 55 | 57 | 43 | 53 | 54 | 52 |
| 20/11/2011 08:00 | 56 | 59 | 44 | 54 | 55 | 52 |
| 20/11/2011 09:00 | 59 | 63 | 45 | 54 | 55 | 52 |
| 20/11/2011 10:00 | 59 | 64 | 43 | 55 | 56 | 53 |
| 20/11/2011 11:00 | 61 | 66 | 46 | 54 | 56 | 52 |
| 20/11/2011 12:00 | 62 | 67 | 46 | 55 | 57 | 53 |
| 20/11/2011 13:00 | 62 | 67 | 47 | 56 | 58 | 53 |
| 20/11/2011 14:00 | 62 | 67 | 48 | 56 | 58 | 53 |
| 20/11/2011 15:00 | 62 | 67 | 48 | 55 | 57 | 53 |
| 20/11/2011 16:00 | 62 | 66 | 47 | 55 | 56 | 53 |
| 20/11/2011 17:00 | 61 | 65 | 46 | 54 | 55 | 52 |
| 20/11/2011 18:00 | 61 | 65 | 46 | 54 | 56 | 53 |
| 20/11/2011 19:00 | 59 | 64 | 44 | 55 | 57 | 52 |
| 20/11/2011 20:00 | 59 | 64 | 43 | 55 | 58 | 53 |
| 20/11/2011 21:00 | 57 | 61 | 42 | 55 | 57 | 52 |
| 20/11/2011 22:00 | 56 | 60 | 41 | 54 | 57 | 51 |
| 20/11/2011 23:00 | 54 | 57 | 39 | 55 | 57 | 52 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 20/11/2011 00:00 | 52 | 53 | 40 | 53 | 55 | 51 |
| 21/11/2011 01:00 | 51 | 50 | 39 | 53 | 55 | 51 |
| 21/11/2011 02:00 | 48 | 46 | 40 | 52 | 54 | 50 |
| 21/11/2011 03:00 | 51 | 48 | 40 | 52 | 54 | 50 |
| 21/11/2011 04:00 | 53 | 52 | 41 | 52 | 54 | 50 |
| 21/11/2011 05:00 | 55 | 55 | 42 | 52 | 53 | 51 |
| 21/11/2011 06:00 | 60 | 65 | 46 | 53 | 55 | 51 |
| 21/11/2011 07:00 | 63 | 67 | 51 | 53 | 54 | 52 |
| 21/11/2011 08:00 | 64 | 68 | 53 | 56 | 57 | 53 |
| 21/11/2011 09:00 | 63 | 67 | 50 | 54 | 56 | 52 |
| 21/11/2011 10:00 | 62 | 66 | 47 | 55 | 57 | 52 |
| 21/11/2011 11:00 | 62 | 67 | 47 | 59 | 62 | 54 |
| 21/11/2011 12:00 | 62 | 67 | 46 | 58 | 61 | 52 |
| 21/11/2011 13:00 | 61 | 66 | 46 | 57 | 60 | 52 |
| 21/11/2011 14:00 | 62 | 66 | 49 | 59 | 60 | 56 |
| 21/11/2011 15:00 | 62 | 66 | 47 | 57 | 58 | 56 |
| 21/11/2011 16:00 | 62 | 66 | 48 | 55 | 57 | 48 |
| 21/11/2011 17:00 | 62 | 66 | 51 | 49 | 50 | 47 |
| 21/11/2011 18:00 | 61 | 65 | 47 | 49 | 52 | 46 |
| 21/11/2011 19:00 | 60 | 65 | 47 | 46 | 47 | 45 |
| 21/11/2011 20:00 | 59 | 63 | 46 | 46 | 47 | 45 |
| 21/11/2011 21:00 | 58 | 62 | 46 | 47 | 48 | 46 |
| 21/11/2011 22:00 | 55 | 59 | 44 | 47 | 48 | 46 |
| 21/11/2011 23:00 | 54 | 56 | 43 | 46 | 47 | 45 |
| 21/11/2011 00:00 | 52 | 53 | 43 | 46 | 47 | 46 |
| 22/11/2011 01:00 | 49 | 48 | 42 | 47 | 46 | 44 |
| 22/11/2011 02:00 | 49 | 47 | 42 | 45 | 46 | 44 |
| 22/11/2011 03:00 | 51 | 48 | 43 | 47 | 50 | 44 |
| 22/11/2011 04:00 | 52 | 50 | 44 | 46 | 47 | 45 |
| 22/11/2011 05:00 | 56 | 58 | 43 | 52 | 58 | 45 |
| 22/11/2011 06:00 | 59 | 64 | 45 | 48 | 50 | 46 |
| 22/11/2011 07:00 | 63 | 67 | 52 | 50 | 52 | 48 |
| 22/11/2011 08:00 | 65 | 68 | 55 | 54 | 57 | 51 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 22/11/2011 09:00 | 63 | 67 | 50 | 56 | 57 | 54 |
| 22/11/2011 10:00 | 61 | 66 | 46 | 53 | 57 | 47 |
| 22/11/2011 11:00 | 62 | 66 | 48 | 56 | 58 | 51 |
| 22/11/2011 12:00 | 62 | 67 | 50 | 57 | 60 | 54 |
| 22/11/2011 13:00 | 62 | 67 | 50 | 58 | 60 | 54 |
| 22/11/2011 14:00 | 63 | 67 | 50 | 58 | 61 | 54 |
| 22/11/2011 15:00 | 63 | 67 | 51 | 57 | 59 | 55 |
| 22/11/2011 16:00 | 64 | 67 | 53 | 56 | 57 | 52 |
| 22/11/2011 17:00 | 64 | 67 | 54 | 57 | 59 | 51 |
| 22/11/2011 18:00 | 63 | 67 | 53 | 51 | 52 | 49 |
| 22/11/2011 19:00 | 62 | 66 | 50 | 50 | 51 | 48 |
| 22/11/2011 20:00 | 60 | 65 | 47 | 49 | 50 | 46 |
| 22/11/2011 21:00 | 59 | 64 | 46 | 48 | 50 | 45 |
| 22/11/2011 22:00 | 57 | 61 | 43 | 46 | 48 | 44 |
| 22/11/2011 23:00 | 54 | 57 | 42 | 46 | 48 | 44 |
| 22/11/2011 00:00 | 52 | 54 | 41 | 45 | 47 | 44 |
| 23/11/2011 01:00 | 51 | 50 | 40 | 45 | 46 | 44 |
| 23/11/2011 02:00 | 51 | 49 | 40 | 49 | 47 | 44 |
| 23/11/2011 03:00 | 52 | 49 | 40 | 45 | 47 | 44 |
| 23/11/2011 04:00 | 53 | 53 | 41 | 46 | 48 | 43 |
| 23/11/2011 05:00 | 56 | 58 | 42 | 46 | 48 | 43 |
| 23/11/2011 06:00 | 61 | 65 | 46 | 48 | 51 | 45 |
| 23/11/2011 07:00 | 63 | 67 | 52 | 51 | 53 | 47 |
| 23/11/2011 08:00 | 65 | 68 | 56 | 56 | 58 | 51 |
| 23/11/2011 09:00 | 63 | 67 | 53 | 57 | 59 | 55 |
| 23/11/2011 10:00 | 62 | 67 | 52 | 55 | 56 | 54 |
| 23/11/2011 11:00 | 63 | 67 | 51 | 55 | 57 | 54 |
| 23/11/2011 12:00 | 63 | 67 | 51 | 55 | 56 | 53 |
| 23/11/2011 13:00 | 63 | 67 | 52 | 56 | 57 | 54 |
| 23/11/2011 14:00 | 62 | 66 | 51 | 56 | 58 | 54 |
| 23/11/2011 15:00 | 62 | 66 | 52 | 56 | 58 | 54 |
| 23/11/2011 16:00 | 62 | 66 | 52 | 55 | 57 | 51 |
| 23/11/2011 17:00 | 63 | 66 | 54 | 52 | 54 | 50 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 23/11/2011 18:00 | 63 | 67 | 53 | 52 | 54 | 50 |
| 23/11/2011 19:00 | 62 | 66 | 50 | 49 | 51 | 47 |
| 23/11/2011 20:00 | 60 | 65 | 47 | 48 | 50 | 46 |
| 23/11/2011 21:00 | 58 | 63 | 45 | 48 | 50 | 45 |
| 23/11/2011 22:00 | 58 | 61 | 43 | 47 | 49 | 45 |
| 23/11/2011 23:00 | 55 | 59 | 42 | 46 | 48 | 44 |
| 23/11/2011 00:00 | 52 | 54 | 40 | 48 | 48 | 44 |
| 24/11/2011 01:00 | 51 | 51 | 40 | 46 | 48 | 44 |
| 24/11/2011 02:00 | 50 | 49 | 40 | 46 | 48 | 44 |
| 24/11/2011 03:00 | 51 | 50 | 40 | 46 | 49 | 44 |
| 24/11/2011 04:00 | 53 | 53 | 40 | 47 | 50 | 44 |
| 24/11/2011 05:00 | 56 | 58 | 41 | 47 | 49 | 44 |
| 24/11/2011 06:00 | 60 | 65 | 45 | 50 | 51 | 46 |
| 24/11/2011 07:00 | 63 | 67 | 51 | 51 | 53 | 48 |
| 24/11/2011 08:00 | 64 | 68 | 56 | 55 | 58 | 51 |
| 24/11/2011 09:00 | 64 | 67 | 54 | 56 | 58 | 53 |
| 24/11/2011 10:00 | 63 | 67 | 53 | 56 | 58 | 52 |
| 24/11/2011 11:00 | 64 | 68 | 54 | 58 | 60 | 54 |
| 24/11/2011 12:00 | 64 | 68 | 54 | 59 | 61 | 55 |
| 24/11/2011 13:00 | 65 | 69 | 56 | 59 | 61 | 56 |
| 24/11/2011 14:00 | 65 | 68 | 56 | 59 | 62 | 55 |
| 24/11/2011 15:00 | 64 | 67 | 57 | 58 | 60 | 54 |
| 24/11/2011 16:00 | 64 | 67 | 55 | 55 | 57 | 53 |
| 24/11/2011 17:00 | 64 | 67 | 56 | 53 | 55 | 51 |
| 24/11/2011 18:00 | 63 | 67 | 53 | 52 | 54 | 49 |
| 24/11/2011 19:00 | 62 | 66 | 50 | 50 | 52 | 48 |
| 24/11/2011 20:00 | 61 | 66 | 50 | 52 | 54 | 48 |
| 24/11/2011 21:00 | 59 | 64 | 48 | 47 | 48 | 45 |
| 24/11/2011 22:00 | 58 | 62 | 45 | 47 | 47 | 44 |
| 24/11/2011 23:00 | 56 | 60 | 43 | 45 | 47 | 43 |
| 24/11/2011 00:00 | 54 | 57 | 42 | 45 | 47 | 43 |
| 25/11/2011 01:00 | 52 | 53 | 42 | 46 | 47 | 43 |
| 25/11/2011 02:00 | 52 | 51 | 42 | 46 | 49 | 43 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 25/11/2011 03:00 | 52 | 50 | 41 | 45 | 46 | 43 |
| 25/11/2011 04:00 | 54 | 53 | 41 | 45 | 46 | 43 |
| 25/11/2011 05:00 | 57 | 59 | 41 | 46 | 48 | 43 |
| 25/11/2011 06:00 | 61 | 65 | 45 | 48 | 51 | 45 |
| 25/11/2011 07:00 | 63 | 67 | 52 | 52 | 54 | 49 |
| 25/11/2011 08:00 | 65 | 69 | 56 | 56 | 58 | 52 |
| 25/11/2011 09:00 | 64 | 68 | 54 | 57 | 59 | 54 |
| 25/11/2011 10:00 | 63 | 67 | 53 | 56 | 58 | 54 |
| 25/11/2011 11:00 | 63 | 67 | 54 | 56 | 58 | 53 |
| 25/11/2011 12:00 | 64 | 67 | 55 | 57 | 59 | 54 |
| 25/11/2011 13:00 | 63 | 67 | 55 | 54 | 57 | 50 |
| 25/11/2011 14:00 | 63 | 67 | 54 | 55 | 58 | 50 |
| 25/11/2011 15:00 | 63 | 67 | 53 | 54 | 57 | 49 |
| 25/11/2011 16:00 | 64 | 67 | 55 | 55 | 58 | 49 |
| 25/11/2011 17:00 | 63 | 67 | 55 | 50 | 52 | 48 |
| 25/11/2011 18:00 | 63 | 67 | 53 | 51 | 53 | 49 |
| 25/11/2011 19:00 | 62 | 66 | 52 | 50 | 52 | 48 |
| 25/11/2011 20:00 | 61 | 65 | 50 | 49 | 51 | 47 |
| 25/11/2011 21:00 | 59 | 64 | 47 | 48 | 50 | 46 |
| 25/11/2011 22:00 | 58 | 62 | 46 | 48 | 50 | 46 |
| 25/11/2011 23:00 | 56 | 60 | 45 | 47 | 49 | 45 |
| 25/11/2011 00:00 | 55 | 58 | 44 | 47 | 49 | 45 |
| 26/11/2011 01:00 | 55 | 57 | 45 | 47 | 49 | 45 |
| 26/11/2011 02:00 | 54 | 54 | 43 | 47 | 49 | 45 |
| 26/11/2011 03:00 | 55 | 55 | 44 | 47 | 49 | 45 |
| 26/11/2011 04:00 | 54 | 54 | 44 | 50 | 52 | 47 |
| 26/11/2011 05:00 | 55 | 56 | 45 | 49 | 51 | 46 |
| 26/11/2011 06:00 | 57 | 60 | 45 | 48 | 51 | 46 |
| 26/11/2011 07:00 | 59 | 63 | 46 | 49 | 50 | 45 |
| 26/11/2011 08:00 | 61 | 65 | 47 | 52 | 55 | 47 |
| 26/11/2011 09:00 | 62 | 66 | 50 | 54 | 56 | 49 |
| 26/11/2011 10:00 | 62 | 66 | 51 | 60 | 64 | 52 |
| 26/11/2011 11:00 | 63 | 67 | 53 | 59 | 63 | 51 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 26/11/2011 12:00 | 64 | 67 | 54 | 56 | 59 | 52 |
| 26/11/2011 13:00 | 64 | 68 | 55 | 55 | 57 | 51 |
| 26/11/2011 14:00 | 64 | 67 | 55 | 56 | 58 | 51 |
| 26/11/2011 15:00 | 63 | 67 | 53 | 54 | 57 | 50 |
| 26/11/2011 16:00 | 62 | 66 | 52 | 53 | 55 | 50 |
| 26/11/2011 17:00 | 61 | 65 | 50 | 53 | 55 | 49 |
| 26/11/2011 18:00 | 61 | 65 | 51 | 55 | 57 | 50 |
| 26/11/2011 19:00 | 61 | 65 | 51 | 54 | 56 | 50 |
| 26/11/2011 20:00 | 60 | 64 | 49 | 53 | 56 | 50 |
| 26/11/2011 21:00 | 60 | 64 | 51 | 58 | 61 | 53 |
| 26/11/2011 22:00 | 59 | 63 | 50 | 57 | 60 | 52 |
| 26/11/2011 23:00 | 59 | 63 | 50 | 56 | 59 | 52 |
| 26/11/2011 00:00 | 59 | 63 | 51 | 57 | 60 | 52 |
| 27/11/2011 01:00 | 59 | 62 | 49 | 56 | 59 | 50 |
| 27/11/2011 02:00 | 60 | 64 | 51 | 58 | 62 | 51 |
| 27/11/2011 03:00 | 59 | 63 | 51 | 57 | 61 | 51 |
| 27/11/2011 04:00 | 55 | 58 | 49 | 52 | 55 | 47 |
| 27/11/2011 05:00 | 56 | 59 | 49 | 52 | 55 | 47 |
| 27/11/2011 06:00 | 56 | 58 | 49 | 51 | 54 | 46 |
| 27/11/2011 07:00 | 57 | 60 | 50 | 50 | 53 | 46 |
| 27/11/2011 08:00 | 58 | 61 | 49 | 51 | 53 | 47 |
| 27/11/2011 09:00 | 59 | 63 | 50 | 50 | 53 | 46 |
| 27/11/2011 10:00 | 59 | 63 | 50 | 48 | 50 | 45 |
| 27/11/2011 11:00 | 60 | 65 | 50 | 48 | 50 | 45 |
| 27/11/2011 12:00 | 61 | 66 | 50 | 47 | 49 | 45 |
| 27/11/2011 13:00 | 62 | 66 | 51 | 50 | 52 | 46 |
| 27/11/2011 14:00 | 62 | 66 | 51 | 49 | 50 | 46 |
| 27/11/2011 15:00 | 63 | 66 | 52 | 50 | 52 | 47 |
| 27/11/2011 16:00 | 62 | 66 | 52 | 49 | 51 | 47 |
| 27/11/2011 17:00 | 61 | 66 | 51 | 49 | 51 | 47 |
| 27/11/2011 18:00 | 61 | 65 | 51 | 49 | 51 | 47 |
| 27/11/2011 19:00 | 60 | 65 | 49 | 48 | 50 | 46 |
| 27/11/2011 20:00 | 59 | 63 | 47 | 48 | 49 | 46 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 27/11/2011 21:00 | 58 | 62 | 46 | 48 | 49 | 46 |
| 27/11/2011 22:00 | 56 | 60 | 45 | 47 | 48 | 45 |
| 27/11/2011 23:00 | 55 | 57 | 43 | 46 | 48 | 45 |
| 27/11/2011 00:00 | 52 | 54 | 40 | 46 | 47 | 45 |
| 28/11/2011 01:00 | 52 | 51 | 40 | 46 | 47 | 44 |
| 28/11/2011 02:00 | 51 | 50 | 40 | 46 | 47 | 44 |
| 28/11/2011 03:00 | 51 | 50 | 40 | 46 | 47 | 45 |
| 28/11/2011 04:00 | 53 | 50 | 40 | 46 | 48 | 45 |
| 28/11/2011 05:00 | 57 | 58 | 41 | 47 | 49 | 45 |
| 28/11/2011 06:00 | 60 | 65 | 44 | 49 | 51 | 46 |
| 28/11/2011 07:00 | 63 | 68 | 50 | 51 | 53 | 47 |
| 28/11/2011 08:00 | 66 | 69 | 56 | 55 | 58 | 51 |
| 28/11/2011 09:00 | 64 | 68 | 52 | 58 | 62 | 51 |
| 28/11/2011 10:00 | 63 | 68 | 51 | 54 | 58 | 50 |
| 28/11/2011 11:00 | 63 | 67 | 51 | 54 | 55 | 51 |
| 28/11/2011 12:00 | 63 | 67 | 52 | 55 | 59 | 50 |
| 28/11/2011 13:00 | 63 | 67 | 52 | 54 | 57 | 51 |
| 28/11/2011 14:00 | 64 | 68 | 53 | 54 | 56 | 51 |
| 28/11/2011 15:00 | 64 | 68 | 54 | 53 | 55 | 50 |
| 28/11/2011 16:00 | 64 | 68 | 54 | 55 | 57 | 51 |
| 28/11/2011 17:00 | 64 | 67 | 54 | 57 | 62 | 50 |
| 28/11/2011 18:00 | 63 | 67 | 52 | 52 | 53 | 49 |
| 28/11/2011 19:00 | 62 | 66 | 50 | 51 | 53 | 48 |
| 28/11/2011 20:00 | 61 | 65 | 48 | 50 | 52 | 47 |
| 28/11/2011 21:00 | 60 | 64 | 48 | 50 | 52 | 47 |
| 28/11/2011 22:00 | 58 | 62 | 46 | 51 | 53 | 47 |
| 28/11/2011 23:00 | 57 | 61 | 46 | 51 | 53 | 47 |
| 28/11/2011 00:00 | 57 | 60 | 47 | 52 | 55 | 49 |
| 29/11/2011 01:00 | 57 | 60 | 47 | 53 | 56 | 49 |
| 29/11/2011 02:00 | 57 | 60 | 48 | 54 | 57 | 50 |
| 29/11/2011 03:00 | 57 | 60 | 47 | 54 | 57 | 49 |
| 29/11/2011 04:00 | 57 | 59 | 46 | 53 | 55 | 48 |
| 29/11/2011 05:00 | 59 | 63 | 48 | 54 | 57 | 50 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 29/11/2011 06:00 | 62 | 66 | 50 | 54 | 57 | 50 |
| 29/11/2011 07:00 | 65 | 68 | 55 | 56 | 58 | 52 |
| 29/11/2011 08:00 | 66 | 69 | 57 | 56 | 58 | 53 |
| 29/11/2011 09:00 | 66 | 70 | 56 | 55 | 57 | 51 |
| 29/11/2011 10:00 | 64 | 68 | 54 | 52 | 54 | 49 |
| 29/11/2011 11:00 | 63 | 67 | 54 | 57 | 57 | 48 |
| 29/11/2011 12:00 | 64 | 68 | 53 | 56 | 57 | 50 |
| 29/11/2011 13:00 | 64 | 68 | 53 | 55 | 58 | 49 |
| 29/11/2011 14:00 | 64 | 68 | 53 | 53 | 59 | 49 |
| 29/11/2011 15:00 | 64 | 67 | 54 | 54 | 58 | 50 |
| 29/11/2011 16:00 | 63 | 67 | 54 | 56 | 59 | 49 |
| 29/11/2011 17:00 | 63 | 67 | 54 | 52 | 52 | 48 |
| 29/11/2011 18:00 | 63 | 67 | 54 | 50 | 51 | 47 |
| 29/11/2011 19:00 | 62 | 66 | 49 | 48 | 50 | 46 |
| 29/11/2011 20:00 | 60 | 65 | 47 | 47 | 49 | 45 |
| 29/11/2011 21:00 | 59 | 63 | 46 | 47 | 48 | 44 |
| 29/11/2011 22:00 | 57 | 61 | 44 | 46 | 48 | 44 |
| 29/11/2011 23:00 | 57 | 61 | 44 | 45 | 46 | 44 |
| 29/11/2011 00:00 | 53 | 53 | 41 | 45 | 46 | 43 |
| 30/11/2011 01:00 | 51 | 48 | 41 | 45 | 46 | 44 |
| 30/11/2011 02:00 | 49 | 47 | 41 | 47 | 45 | 44 |
| 30/11/2011 03:00 | 51 | 53 | 40 | 45 | 46 | 44 |
| 30/11/2011 04:00 | 53 | 54 | 40 | 46 | 46 | 44 |
| 30/11/2011 05:00 | 56 | 58 | 41 | 46 | 49 | 44 |
| 30/11/2011 06:00 | 60 | 63 | 45 | 51 | 51 | 45 |
| 30/11/2011 07:00 | 63 | 65 | 50 | 52 | 54 | 46 |
| 30/11/2011 08:00 | 65 | 66 | 55 | 56 | 58 | 49 |
| 30/11/2011 09:00 | 64 | 66 | 51 | 56 | 57 | 51 |
| 30/11/2011 10:00 | 63 | 65 | 50 | 56 | 58 | 50 |
| 30/11/2011 11:00 | 63 | 66 | 49 | 55 | 57 | 51 |
| 30/11/2011 12:00 | 63 | 66 | 50 | 56 | 56 | 51 |
| 30/11/2011 13:00 | 63 | 66 | 51 | 56 | 56 | 51 |
| 30/11/2011 14:00 | 63 | 66 | 51 | 56 | 56 | 51 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 30/11/2011 15:00 | 63 | 66 | 52 | 55 | 56 | 52 |
| 30/11/2011 16:00 | 63 | 66 | 53 | 54 | 54 | 50 |
| 30/11/2011 17:00 | 63 | 66 | 53 | 52 | 54 | 49 |
| 30/11/2011 18:00 | 63 | 65 | 52 | 51 | 52 | 48 |
| 30/11/2011 19:00 | 62 | 65 | 49 | 49 | 50 | 46 |
| 30/11/2011 20:00 | 60 | 64 | 46 | 48 | 50 | 45 |
| 30/11/2011 21:00 | 59 | 63 | 46 | 47 | 49 | 44 |
| 30/11/2011 22:00 | 58 | 61 | 44 | 46 | 48 | 44 |
| 30/11/2011 23:00 | 56 | 58 | 43 | 45 | 49 | 43 |
| 01/12/2011 00:00 | 53 | 53 | 41 | 47 | 46 | 43 |
| 01/12/2011 01:00 | 51 | 50 | 40 | 43 | 44 | 42 |
| 01/12/2011 02:00 | 50 | 47 | 39 | 43 | 44 | 42 |
| 01/12/2011 03:00 | 50 | 48 | 39 | 44 | 45 | 42 |
| 01/12/2011 04:00 | 54 | 52 | 38 | 45 | 47 | 42 |
| 01/12/2011 05:00 | 57 | 59 | 39 | 47 | 48 | 44 |
| 01/12/2011 06:00 | 61 | 66 | 46 | 49 | 51 | 45 |
| 01/12/2011 07:00 | 64 | 68 | 53 | 52 | 55 | 49 |
| 01/12/2011 08:00 | 65 | 68 | 56 | 56 | 59 | 52 |
| 01/12/2011 09:00 | 64 | 68 | 53 | 57 | 59 | 51 |
| 01/12/2011 10:00 | 63 | 67 | 51 | 56 | 59 | 51 |
| 01/12/2011 11:00 | 64 | 67 | 51 | 56 | 58 | 51 |
| 01/12/2011 12:00 | 64 | 68 | 52 | 56 | 58 | 51 |
| 01/12/2011 13:00 | 65 | 68 | 54 | 56 | 59 | 52 |
| 01/12/2011 14:00 | 65 | 69 | 55 | 57 | 60 | 53 |
| 01/12/2011 15:00 | 65 | 68 | 55 | 58 | 61 | 54 |
| 01/12/2011 16:00 | 65 | 68 | 56 | 57 | 60 | 54 |
| 01/12/2011 17:00 | 64 | 67 | 56 | 58 | 60 | 53 |
| 01/12/2011 18:00 | 64 | 67 | 54 | 55 | 56 | 52 |
| 01/12/2011 19:00 | 62 | 66 | 52 | 54 | 56 | 51 |
| 01/12/2011 20:00 | 61 | 66 | 50 | 53 | 55 | 50 |
| 01/12/2011 21:00 | 60 | 64 | 48 | 52 | 54 | 49 |
| 01/12/2011 22:00 | 59 | 63 | 47 | 51 | 53 | 49 |
| 01/12/2011 23:00 | 57 | 60 | 45 | 50 | 52 | 48 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 02/12/2011 00:00 | 54 | 55 | 42 | 50 | 51 | 47 |
| 02/12/2011 01:00 | 51 | 51 | 41 | 50 | 51 | 47 |
| 02/12/2011 02:00 | 51 | 50 | 40 | 50 | 51 | 47 |
| 02/12/2011 03:00 | 51 | 50 | 40 | 50 | 51 | 47 |
| 02/12/2011 04:00 | 52 | 51 | 41 | 49 | 51 | 47 |
| 02/12/2011 05:00 | 56 | 58 | 42 | 50 | 51 | 47 |
| 02/12/2011 06:00 | 59 | 63 | 46 | 51 | 52 | 48 |
| 02/12/2011 07:00 | 62 | 66 | 50 | 53 | 55 | 49 |
| 02/12/2011 08:00 | 64 | 67 | 54 | 57 | 60 | 52 |
| 02/12/2011 09:00 | 63 | 66 | 53 | 57 | 59 | 51 |
| 02/12/2011 10:00 | 62 | 66 | 51 | 56 | 57 | 51 |
| 02/12/2011 11:00 | 63 | 67 | 52 | 56 | 58 | 52 |
| 02/12/2011 12:00 | 64 | 67 | 52 | 56 | 59 | 52 |
| 02/12/2011 13:00 | 63 | 67 | 52 | 57 | 59 | 52 |
| 02/12/2011 14:00 | 64 | 67 | 53 | 56 | 58 | 52 |
| 02/12/2011 15:00 | 64 | 67 | 52 | 55 | 56 | 52 |
| 02/12/2011 16:00 | 64 | 67 | 53 | 54 | 56 | 51 |
| 02/12/2011 17:00 | 63 | 66 | 52 | 55 | 57 | 51 |
| 02/12/2011 18:00 | 62 | 66 | 50 | 54 | 55 | 51 |
| 02/12/2011 19:00 | 62 | 66 | 49 | 53 | 55 | 50 |
| 02/12/2011 20:00 | 60 | 65 | 47 | 51 | 54 | 48 |
| 02/12/2011 21:00 | 59 | 64 | 45 | 51 | 53 | 47 |
| 02/12/2011 22:00 | 58 | 62 | 43 | 50 | 52 | 46 |
| 02/12/2011 23:00 | 56 | 60 | 41 | 49 | 53 | 45 |
| 03/12/2011 00:00 | 55 | 57 | 40 | 53 | 56 | 44 |
| 03/12/2011 01:00 | 55 | 57 | 40 | 52 | 54 | 45 |
| 03/12/2011 02:00 | 54 | 55 | 39 | 48 | 50 | 44 |
| 03/12/2011 03:00 | 54 | 55 | 38 | 49 | 51 | 45 |
| 03/12/2011 04:00 | 53 | 53 | 39 | 48 | 50 | 45 |
| 03/12/2011 05:00 | 54 | 54 | 39 | 48 | 51 | 44 |
| 03/12/2011 06:00 | 56 | 59 | 40 | 48 | 50 | 44 |
| 03/12/2011 07:00 | 58 | 62 | 43 | 51 | 54 | 46 |
| 03/12/2011 08:00 | 60 | 64 | 46 | 54 | 57 | 49 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 03/12/2011 09:00 | 61 | 65 | 48 | 53 | 56 | 48 |
| 03/12/2011 10:00 | 61 | 66 | 47 | 52 | 54 | 47 |
| 03/12/2011 11:00 | 62 | 66 | 49 | 52 | 55 | 48 |
| 03/12/2011 12:00 | 62 | 66 | 50 | 53 | 54 | 49 |
| 03/12/2011 13:00 | 62 | 66 | 48 | 53 | 55 | 48 |
| 03/12/2011 14:00 | 62 | 66 | 49 | 55 | 57 | 47 |
| 03/12/2011 15:00 | 62 | 66 | 49 | 53 | 55 | 47 |
| 03/12/2011 16:00 | 62 | 66 | 51 | 53 | 54 | 49 |
| 03/12/2011 17:00 | 61 | 65 | 49 | 53 | 53 | 49 |
| 03/12/2011 18:00 | 61 | 65 | 49 | 51 | 52 | 48 |
| 03/12/2011 19:00 | 60 | 64 | 46 | 50 | 52 | 48 |
| 03/12/2011 20:00 | 59 | 63 | 46 | 50 | 52 | 48 |
| 03/12/2011 21:00 | 58 | 62 | 45 | 49 | 50 | 46 |
| 03/12/2011 22:00 | 56 | 60 | 43 | 49 | 50 | 46 |
| 03/12/2011 23:00 | 55 | 59 | 42 | 47 | 48 | 46 |
| 04/12/2011 00:00 | 55 | 57 | 43 | 48 | 50 | 45 |
| 04/12/2011 01:00 | 54 | 57 | 43 | 47 | 49 | 45 |
| 04/12/2011 02:00 | 54 | 56 | 43 | 47 | 48 | 45 |
| 04/12/2011 03:00 | 55 | 57 | 43 | 47 | 48 | 45 |
| 04/12/2011 04:00 | 53 | 53 | 42 | 47 | 48 | 45 |
| 04/12/2011 05:00 | 53 | 52 | 43 | 48 | 49 | 45 |
| 04/12/2011 06:00 | 53 | 54 | 42 | 47 | 49 | 45 |
| 04/12/2011 07:00 | 55 | 57 | 42 | 48 | 50 | 46 |
| 04/12/2011 08:00 | 56 | 59 | 44 | 50 | 52 | 47 |
| 04/12/2011 09:00 | 58 | 61 | 44 | 50 | 51 | 47 |
| 04/12/2011 10:00 | 59 | 64 | 45 | 50 | 52 | 47 |
| 04/12/2011 11:00 | 61 | 65 | 47 | 51 | 52 | 48 |
| 04/12/2011 12:00 | 62 | 66 | 49 | 52 | 54 | 49 |
| 04/12/2011 13:00 | 62 | 66 | 49 | 52 | 54 | 49 |
| 04/12/2011 14:00 | 62 | 66 | 50 | 52 | 54 | 49 |
| 04/12/2011 15:00 | 63 | 67 | 50 | 52 | 53 | 49 |
| 04/12/2011 16:00 | 62 | 66 | 50 | 51 | 53 | 49 |
| 04/12/2011 17:00 | 61 | 65 | 49 | 50 | 52 | 48 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 04/12/2011 18:00 | 61 | 65 | 48 | 51 | 53 | 49 |
| 04/12/2011 19:00 | 60 | 65 | 46 | 50 | 52 | 48 |
| 04/12/2011 20:00 | 59 | 64 | 45 | 50 | 52 | 47 |
| 04/12/2011 21:00 | 57 | 62 | 43 | 48 | 50 | 46 |
| 04/12/2011 22:00 | 56 | 59 | 41 | 48 | 50 | 45 |
| 04/12/2011 23:00 | 54 | 56 | 37 | 47 | 49 | 44 |
| 05/12/2011 00:00 | 52 | 53 | 36 | 45 | 47 | 43 |
| 05/12/2011 01:00 | 51 | 49 | 34 | 45 | 47 | 43 |
| 05/12/2011 02:00 | 49 | 45 | 34 | 45 | 47 | 42 |
| 05/12/2011 03:00 | 52 | 49 | 37 | 45 | 47 | 43 |
| 05/12/2011 04:00 | 53 | 52 | 38 | 46 | 48 | 44 |
| 05/12/2011 05:00 | 56 | 58 | 41 | 47 | 49 | 45 |
| 05/12/2011 06:00 | 60 | 65 | 45 | 50 | 51 | 46 |
| 05/12/2011 07:00 | 63 | 67 | 51 | 52 | 54 | 49 |
| 05/12/2011 08:00 | 65 | 68 | 54 | 54 | 56 | 51 |
| 05/12/2011 09:00 | 64 | 68 | 52 | 54 | 56 | 50 |
| 05/12/2011 10:00 | 63 | 67 | 49 | 54 | 56 | 50 |
| 05/12/2011 11:00 | 63 | 67 | 49 | 54 | 57 | 50 |
| 05/12/2011 12:00 | 63 | 67 | 49 | 55 | 58 | 49 |
| 05/12/2011 13:00 | 62 | 66 | 50 | 55 | 58 | 50 |
| 05/12/2011 14:00 | 62 | 66 | 50 | 56 | 58 | 53 |
| 05/12/2011 15:00 | 63 | 66 | 51 | 55 | 57 | 53 |
| 05/12/2011 16:00 | 63 | 66 | 51 | 55 | 57 | 48 |
| 05/12/2011 17:00 | 63 | 66 | 53 | 51 | 53 | 47 |
| 05/12/2011 18:00 | 62 | 66 | 50 | 52 | 54 | 46 |
| 05/12/2011 19:00 | 61 | 65 | 48 | 49 | 51 | 45 |
| 05/12/2011 20:00 | 59 | 64 | 46 | 49 | 50 | 47 |
| 05/12/2011 21:00 | 58 | 62 | 44 | 49 | 50 | 47 |
| 05/12/2011 22:00 | 56 | 60 | 42 | 48 | 50 | 45 |
| 05/12/2011 23:00 | 54 | 56 | 41 | 43 | 45 | 42 |
| 06/12/2011 00:00 | 52 | 53 | 40 | 43 | 44 | 41 |
| 06/12/2011 01:00 | 51 | 48 | 39 | 42 | 43 | 41 |
| 06/12/2011 02:00 | 49 | 46 | 39 | 42 | 43 | 40 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 06/12/2011 03:00 | 51 | 47 | 39 | 42 | 44 | 40 |
| 06/12/2011 04:00 | 53 | 50 | 39 | 42 | 44 | 40 |
| 06/12/2011 05:00 | 56 | 57 | 40 | 46 | 49 | 41 |
| 06/12/2011 06:00 | 60 | 64 | 45 | 46 | 48 | 43 |
| 06/12/2011 07:00 | 63 | 67 | 51 | 49 | 51 | 46 |
| 06/12/2011 08:00 | 64 | 68 | 54 | 54 | 56 | 49 |
| 06/12/2011 09:00 | 63 | 67 | 51 | 54 | 55 | 50 |
| 06/12/2011 10:00 | 62 | 66 | 48 | 53 | 55 | 48 |
| 06/12/2011 11:00 | 62 | 66 | 49 | 53 | 55 | 49 |
| 06/12/2011 12:00 | 62 | 67 | 49 | 54 | 56 | 50 |
| 06/12/2011 13:00 | 63 | 67 | 51 | 55 | 57 | 50 |
| 06/12/2011 14:00 | 63 | 67 | 51 | 57 | 60 | 51 |
| 06/12/2011 15:00 | 63 | 67 | 51 | 56 | 59 | 51 |
| 06/12/2011 16:00 | 64 | 67 | 53 | 54 | 56 | 50 |
| 06/12/2011 17:00 | 64 | 67 | 54 | 53 | 54 | 49 |
| 06/12/2011 18:00 | 63 | 67 | 52 | 50 | 52 | 48 |
| 06/12/2011 19:00 | 62 | 66 | 49 | 49 | 51 | 46 |
| 06/12/2011 20:00 | 60 | 64 | 46 | 47 | 49 | 44 |
| 06/12/2011 21:00 | 59 | 63 | 44 | 46 | 48 | 43 |
| 06/12/2011 22:00 | 57 | 61 | 42 | 45 | 47 | 42 |
| 06/12/2011 23:00 | 55 | 58 | 41 | 45 | 47 | 42 |
| 07/12/2011 00:00 | 54 | 55 | 40 | 45 | 47 | 41 |
| 07/12/2011 01:00 | 52 | 50 | 40 | 44 | 46 | 41 |
| 07/12/2011 02:00 | 50 | 49 | 41 | 46 | 47 | 42 |
| 07/12/2011 03:00 | 51 | 48 | 39 | 44 | 45 | 41 |
| 07/12/2011 04:00 | 54 | 52 | 40 | 45 | 47 | 42 |
| 07/12/2011 05:00 | 56 | 58 | 41 | 45 | 48 | 42 |
| 07/12/2011 06:00 | 60 | 65 | 45 | 50 | 53 | 46 |
| 07/12/2011 07:00 | 63 | 67 | 51 | 52 | 54 | 48 |
| 07/12/2011 08:00 | 65 | 68 | 55 | 54 | 57 | 49 |
| 07/12/2011 09:00 | 63 | 67 | 52 | 56 | 58 | 52 |
| 07/12/2011 10:00 | 63 | 67 | 51 | 54 | 57 | 49 |
| 07/12/2011 11:00 | 63 | 67 | 50 | 56 | 57 | 50 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 07/12/2011 12:00 | 63 | 67 | 50 | 55 | 56 | 52 |
| 07/12/2011 13:00 | 63 | 67 | 51 | 55 | 57 | 52 |
| 07/12/2011 14:00 | 62 | 66 | 51 | 54 | 56 | 50 |
| 07/12/2011 15:00 | 63 | 66 | 51 | 53 | 55 | 50 |
| 07/12/2011 16:00 | 63 | 66 | 53 | 53 | 55 | 50 |
| 07/12/2011 17:00 | 63 | 66 | 54 | 52 | 54 | 50 |
| 07/12/2011 18:00 | 63 | 66 | 51 | 51 | 53 | 48 |
| 07/12/2011 19:00 | 62 | 66 | 49 | 48 | 50 | 45 |
| 07/12/2011 20:00 | 60 | 65 | 47 | 48 | 50 | 45 |
| 07/12/2011 21:00 | 59 | 63 | 46 | 48 | 49 | 44 |
| 07/12/2011 22:00 | 58 | 62 | 45 | 48 | 50 | 45 |
| 07/12/2011 23:00 | 56 | 59 | 43 | 48 | 50 | 45 |
| 08/12/2011 00:00 | 54 | 55 | 42 | 48 | 48 | 44 |
| 08/12/2011 01:00 | 51 | 51 | 40 | 45 | 47 | 44 |
| 08/12/2011 02:00 | 51 | 49 | 40 | 46 | 48 | 44 |
| 08/12/2011 03:00 | 52 | 51 | 41 | 51 | 54 | 44 |
| 08/12/2011 04:00 | 53 | 53 | 41 | 49 | 53 | 44 |
| 08/12/2011 05:00 | 56 | 57 | 42 | 48 | 50 | 45 |
| 08/12/2011 06:00 | 60 | 64 | 46 | 49 | 50 | 46 |
| 08/12/2011 07:00 | 63 | 67 | 50 | 51 | 53 | 48 |
| 08/12/2011 08:00 | 64 | 68 | 55 | 54 | 56 | 50 |
| 08/12/2011 09:00 | 64 | 67 | 54 | 56 | 58 | 51 |
| 08/12/2011 10:00 | 63 | 67 | 52 | 54 | 57 | 50 |
| 08/12/2011 11:00 | 64 | 67 | 53 | 58 | 60 | 54 |
| 08/12/2011 12:00 | 64 | 67 | 53 | 58 | 61 | 53 |
| 08/12/2011 13:00 | 64 | 68 | 54 | 57 | 60 | 53 |
| 08/12/2011 14:00 | 64 | 67 | 54 | 57 | 60 | 52 |
| 08/12/2011 15:00 | 63 | 67 | 55 | 55 | 57 | 52 |
| 08/12/2011 16:00 | 65 | 68 | 57 | 55 | 57 | 51 |
| 08/12/2011 17:00 | 64 | 67 | 58 | 53 | 56 | 50 |
| 08/12/2011 18:00 | 64 | 67 | 56 | 54 | 57 | 49 |
| 08/12/2011 19:00 | 62 | 66 | 53 | 51 | 53 | 47 |
| 08/12/2011 20:00 | 61 | 65 | 50 | 49 | 52 | 46 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 08/12/2011 21:00 | 60 | 64 | 50 | 51 | 54 | 47 |
| 08/12/2011 22:00 | 59 | 62 | 47 | 50 | 53 | 45 |
| 08/12/2011 23:00 | 56 | 59 | 43 | 46 | 49 | 44 |
| 08/12/2011 00:00 | 53 | 55 | 42 | 45 | 47 | 43 |
| 09/12/2011 01:00 | 51 | 51 | 42 | 45 | 47 | 43 |
| 09/12/2011 02:00 | 51 | 47 | 40 | 45 | 46 | 43 |
| 09/12/2011 03:00 | 53 | 51 | 41 | 46 | 48 | 43 |
| 09/12/2011 04:00 | 52 | 52 | 42 | 45 | 47 | 43 |
| 09/12/2011 05:00 | 56 | 59 | 42 | 46 | 47 | 43 |
| 09/12/2011 06:00 | 59 | 63 | 45 | 47 | 48 | 44 |
| 09/12/2011 07:00 | 62 | 66 | 50 | 50 | 52 | 47 |
| 09/12/2011 08:00 | 64 | 67 | 54 | 55 | 59 | 50 |
| 09/12/2011 09:00 | 63 | 67 | 53 | 53 | 56 | 48 |
| 09/12/2011 10:00 | 62 | 66 | 51 | 53 | 55 | 48 |
| 09/12/2011 11:00 | 62 | 66 | 51 | 52 | 54 | 48 |
| 09/12/2011 12:00 | 63 | 67 | 52 | 52 | 54 | 48 |
| 09/12/2011 13:00 | 63 | 67 | 53 | 54 | 57 | 49 |
| 09/12/2011 14:00 | 64 | 67 | 54 | 53 | 55 | 48 |
| 09/12/2011 15:00 | 63 | 67 | 54 | 54 | 56 | 48 |
| 09/12/2011 16:00 | 64 | 67 | 55 | 50 | 52 | 47 |
| 09/12/2011 17:00 | 63 | 67 | 55 | 50 | 51 | 47 |
| 09/12/2011 18:00 | 62 | 66 | 54 | 49 | 50 | 47 |
| 09/12/2011 19:00 | 61 | 65 | 50 | 47 | 49 | 46 |
| 09/12/2011 20:00 | 60 | 64 | 48 | 47 | 49 | 45 |
| 09/12/2011 21:00 | 58 | 63 | 47 | 46 | 47 | 45 |
| 09/12/2011 22:00 | 57 | 61 | 46 | 47 | 47 | 44 |
| 09/12/2011 23:00 | 55 | 59 | 44 | 45 | 46 | 44 |
| 09/12/2011 00:00 | 55 | 59 | 42 | 45 | 46 | 43 |
| 10/12/2011 01:00 | 54 | 57 | 41 | 44 | 46 | 43 |
| 10/12/2011 02:00 | 54 | 55 | 41 | 44 | 45 | 43 |
| 10/12/2011 03:00 | 53 | 54 | 40 | 45 | 46 | 43 |
| 10/12/2011 04:00 | 52 | 51 | 40 | 45 | 46 | 43 |
| 10/12/2011 05:00 | 53 | 53 | 40 | 45 | 46 | 43 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 10/12/2011 06:00 | 55 | 57 | 42 | 46 | 48 | 44 |
| 10/12/2011 07:00 | 56 | 60 | 43 | 51 | 55 | 44 |
| 10/12/2011 08:00 | 59 | 63 | 45 | 54 | 58 | 45 |
| 10/12/2011 09:00 | 61 | 65 | 49 | 50 | 52 | 46 |
| 10/12/2011 10:00 | 62 | 66 | 50 | 50 | 51 | 47 |
| 10/12/2011 11:00 | 63 | 67 | 52 | 50 | 52 | 48 |
| 10/12/2011 12:00 | 62 | 66 | 52 | 49 | 51 | 47 |
| 10/12/2011 13:00 | 62 | 66 | 52 | 51 | 54 | 48 |
| 10/12/2011 14:00 | 63 | 67 | 50 | 51 | 52 | 48 |
| 10/12/2011 15:00 | 63 | 67 | 51 | 50 | 52 | 47 |
| 10/12/2011 16:00 | 62 | 66 | 50 | 49 | 51 | 47 |
| 10/12/2011 17:00 | 62 | 66 | 50 | 49 | 51 | 46 |
| 10/12/2011 18:00 | 61 | 66 | 49 | 49 | 51 | 46 |
| 10/12/2011 19:00 | 61 | 65 | 47 | 49 | 50 | 45 |
| 10/12/2011 20:00 | 60 | 64 | 46 | 48 | 49 | 45 |
| 10/12/2011 21:00 | 58 | 63 | 43 | 47 | 49 | 45 |
| 10/12/2011 22:00 | 57 | 61 | 42 | 49 | 52 | 45 |
| 10/12/2011 23:00 | 57 | 60 | 44 | 47 | 49 | 45 |
| 10/12/2011 00:00 | 55 | 58 | 43 | 46 | 48 | 44 |
| 11/12/2011 01:00 | 56 | 59 | 45 | 47 | 48 | 45 |
| 11/12/2011 02:00 | 56 | 59 | 46 | 46 | 48 | 44 |
| 11/12/2011 03:00 | 55 | 56 | 43 | 45 | 47 | 43 |
| 11/12/2011 04:00 | 52 | 52 | 39 | 45 | 45 | 42 |
| 11/12/2011 05:00 | 51 | 50 | 38 | 44 | 46 | 42 |
| 11/12/2011 06:00 | 54 | 55 | 39 | 45 | 47 | 43 |
| 11/12/2011 07:00 | 55 | 57 | 42 | 46 | 48 | 44 |
| 11/12/2011 08:00 | 56 | 58 | 41 | 48 | 51 | 44 |
| 11/12/2011 09:00 | 59 | 63 | 44 | 48 | 50 | 45 |
| 11/12/2011 10:00 | 60 | 65 | 46 | 48 | 50 | 46 |
| 11/12/2011 11:00 | 61 | 66 | 47 | 51 | 52 | 47 |
| 11/12/2011 12:00 | 62 | 67 | 50 | 49 | 51 | 45 |
| 11/12/2011 13:00 | 62 | 66 | 51 | 48 | 49 | 45 |
| 11/12/2011 14:00 | 63 | 68 | 48 | 48 | 50 | 46 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 11/12/2011 15:00 | 63 | 67 | 51 | 51 | 52 | 47 |
| 11/12/2011 16:00 | 63 | 67 | 53 | 50 | 52 | 47 |
| 11/12/2011 17:00 | 62 | 66 | 52 | 49 | 51 | 47 |
| 11/12/2011 18:00 | 62 | 66 | 50 | 48 | 50 | 46 |
| 11/12/2011 19:00 | 61 | 65 | 48 | 48 | 50 | 45 |
| 11/12/2011 20:00 | 59 | 64 | 45 | 47 | 49 | 44 |
| 11/12/2011 21:00 | 58 | 62 | 44 | 47 | 49 | 44 |
| 11/12/2011 22:00 | 56 | 60 | 42 | 45 | 47 | 43 |
| 11/12/2011 23:00 | 54 | 57 | 40 | 45 | 47 | 43 |
| 11/12/2011 00:00 | 53 | 55 | 41 | 45 | 48 | 43 |
| 12/12/2011 01:00 | 50 | 50 | 40 | 45 | 46 | 43 |
| 12/12/2011 02:00 | 48 | 48 | 40 | 46 | 48 | 43 |
| 12/12/2011 03:00 | 52 | 52 | 41 | 45 | 47 | 43 |
| 12/12/2011 04:00 | 53 | 53 | 41 | 45 | 47 | 43 |
| 12/12/2011 05:00 | 57 | 59 | 42 | 46 | 48 | 43 |
| 12/12/2011 06:00 | 60 | 65 | 46 | 48 | 50 | 45 |
| 12/12/2011 07:00 | 63 | 67 | 53 | 50 | 52 | 47 |
| 12/12/2011 08:00 | 64 | 68 | 55 | 55 | 58 | 51 |
| 12/12/2011 09:00 | 64 | 67 | 53 | 54 | 58 | 49 |
| 12/12/2011 10:00 | 62 | 67 | 50 | 54 | 57 | 50 |
| 12/12/2011 11:00 | 63 | 67 | 51 | 57 | 60 | 51 |
| 12/12/2011 12:00 | 63 | 68 | 50 | 58 | 61 | 51 |
| 12/12/2011 13:00 | 64 | 68 | 51 | 57 | 60 | 52 |
| 12/12/2011 14:00 | 65 | 69 | 52 | 57 | 61 | 53 |
| 12/12/2011 15:00 | 66 | 69 | 54 | 55 | 57 | 53 |
| 12/12/2011 16:00 | 66 | 69 | 56 | 56 | 57 | 52 |
| 12/12/2011 17:00 | 65 | 69 | 56 | 56 | 58 | 51 |
| 12/12/2011 18:00 | 64 | 67 | 54 | 51 | 53 | 48 |
| 12/12/2011 19:00 | 62 | 67 | 51 | 52 | 55 | 49 |
| 12/12/2011 20:00 | 61 | 66 | 50 | 52 | 55 | 48 |
| 12/12/2011 21:00 | 59 | 63 | 48 | 49 | 52 | 45 |
| 12/12/2011 22:00 | 58 | 62 | 44 | 47 | 49 | 44 |
| 12/12/2011 23:00 | 56 | 59 | 42 | 46 | 48 | 43 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 12/12/2011 00:00 | 52 | 53 | 40 | 47 | 49 | 44 |
| 13/12/2011 01:00 | 51 | 52 | 40 | 46 | 48 | 44 |
| 13/12/2011 02:00 | 48 | 49 | 41 | 46 | 47 | 43 |
| 13/12/2011 03:00 | 53 | 51 | 42 | 49 | 52 | 45 |
| 13/12/2011 04:00 | 54 | 56 | 42 | 56 | 60 | 47 |
| 13/12/2011 05:00 | 59 | 63 | 46 | 53 | 56 | 48 |
| 13/12/2011 06:00 | 61 | 66 | 47 | 52 | 54 | 49 |
| 13/12/2011 07:00 | 64 | 68 | 53 | 55 | 58 | 51 |
| 13/12/2011 08:00 | 66 | 69 | 57 | 57 | 59 | 53 |
| 13/12/2011 09:00 | 65 | 69 | 55 | 56 | 59 | 53 |
| 13/12/2011 10:00 | 65 | 68 | 55 | 57 | 59 | 53 |
| 13/12/2011 11:00 | 64 | 68 | 54 | 59 | 62 | 54 |
| 13/12/2011 12:00 | 65 | 69 | 56 | 59 | 62 | 54 |
| 13/12/2011 13:00 | 66 | 69 | 58 | 61 | 63 | 56 |
| 13/12/2011 14:00 | 65 | 68 | 55 | 61 | 63 | 58 |
| 13/12/2011 15:00 | 65 | 69 | 57 | 60 | 63 | 55 |
| 13/12/2011 16:00 | 65 | 68 | 57 | 58 | 60 | 54 |
| 13/12/2011 17:00 | 65 | 68 | 56 | 58 | 60 | 54 |
| 13/12/2011 18:00 | 64 | 68 | 55 | 57 | 59 | 53 |
| 13/12/2011 19:00 | 62 | 66 | 52 | 56 | 58 | 52 |
| 13/12/2011 20:00 | 61 | 65 | 50 | 54 | 57 | 50 |
| 13/12/2011 21:00 | 59 | 63 | 48 | 53 | 55 | 49 |
| 13/12/2011 22:00 | 58 | 62 | 47 | 54 | 57 | 49 |
| 13/12/2011 23:00 | 58 | 60 | 45 | 51 | 54 | 47 |
| 13/12/2011 00:00 | 54 | 56 | 45 | 51 | 54 | 47 |
| 14/12/2011 01:00 | 53 | 54 | 44 | 55 | 58 | 49 |
| 14/12/2011 02:00 | 54 | 56 | 45 | 50 | 53 | 45 |
| 14/12/2011 03:00 | 51 | 49 | 41 | 48 | 51 | 45 |
| 14/12/2011 04:00 | 52 | 52 | 42 | 47 | 49 | 44 |
| 14/12/2011 05:00 | 56 | 59 | 42 | 49 | 51 | 46 |
| 14/12/2011 06:00 | 60 | 64 | 47 | 49 | 51 | 47 |
| 14/12/2011 07:00 | 63 | 67 | 51 | 52 | 55 | 49 |
| 14/12/2011 08:00 | 64 | 67 | 55 | 55 | 58 | 52 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 14/12/2011 09:00 | 63 | 67 | 54 | 57 | 59 | 52 |
| 14/12/2011 10:00 | 62 | 66 | 52 | 54 | 56 | 50 |
| 14/12/2011 11:00 | 62 | 67 | 52 | 59 | 63 | 50 |
| 14/12/2011 12:00 | 62 | 67 | 51 | 54 | 57 | 49 |
| 14/12/2011 13:00 | 62 | 67 | 51 | 57 | 59 | 50 |
| 14/12/2011 14:00 | 63 | 67 | 52 | 57 | 59 | 50 |
| 14/12/2011 15:00 | 63 | 67 | 53 | 53 | 55 | 50 |
| 14/12/2011 16:00 | 63 | 67 | 55 | 56 | 58 | 51 |
| 14/12/2011 17:00 | 63 | 67 | 54 | 54 | 58 | 50 |
| 14/12/2011 18:00 | 63 | 67 | 52 | 51 | 52 | 49 |
| 14/12/2011 19:00 | 61 | 66 | 50 | 51 | 53 | 49 |
| 14/12/2011 20:00 | 60 | 65 | 47 | 49 | 51 | 47 |
| 14/12/2011 21:00 | 59 | 64 | 44 | 48 | 49 | 46 |
| 14/12/2011 22:00 | 57 | 61 | 44 | 47 | 48 | 46 |
| 14/12/2011 23:00 | 56 | 60 | 43 | 45 | 46 | 44 |
| 14/12/2011 00:00 | 53 | 53 | 42 | 46 | 46 | 44 |
| 15/12/2011 01:00 | 53 | 53 | 42 | 44 | 45 | 43 |
| 15/12/2011 02:00 | 51 | 52 | 43 | 44 | 46 | 43 |
| 15/12/2011 03:00 | 52 | 52 | 42 | 45 | 46 | 43 |
| 15/12/2011 04:00 | 53 | 52 | 41 | 46 | 47 | 43 |
| 15/12/2011 05:00 | 56 | 58 | 42 | 46 | 47 | 44 |
| 15/12/2011 06:00 | 60 | 65 | 48 | 49 | 50 | 46 |
| 15/12/2011 07:00 | 62 | 66 | 52 | 51 | 54 | 48 |
| 15/12/2011 08:00 | 64 | 67 | 55 | 56 | 60 | 51 |
| 15/12/2011 09:00 | 64 | 68 | 54 | 56 | 60 | 50 |
| 15/12/2011 10:00 | 63 | 68 | 53 | 56 | 59 | 50 |
| 15/12/2011 11:00 | 63 | 67 | 52 | 57 | 60 | 51 |
| 15/12/2011 12:00 | 63 | 67 | 53 | 54 | 56 | 50 |
| 15/12/2011 13:00 | 63 | 67 | 53 | 55 | 58 | 50 |
| 15/12/2011 14:00 | 63 | 67 | 52 | 56 | 59 | 50 |
| 15/12/2011 15:00 | 63 | 67 | 53 | 57 | 60 | 52 |
| 15/12/2011 16:00 | 64 | 67 | 55 | 56 | 59 | 52 |
| 15/12/2011 17:00 | 63 | 67 | 54 | 57 | 59 | 51 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 15/12/2011 18:00 | 63 | 67 | 53 | 51 | 53 | 49 |
| 15/12/2011 19:00 | 61 | 66 | 51 | 50 | 52 | 48 |
| 15/12/2011 20:00 | 61 | 65 | 49 | 49 | 51 | 46 |
| 15/12/2011 21:00 | 59 | 64 | 46 | 47 | 48 | 45 |
| 15/12/2011 22:00 | 57 | 62 | 45 | 46 | 48 | 44 |
| 15/12/2011 23:00 | 55 | 59 | 44 | 45 | 47 | 44 |
| 15/12/2011 00:00 | 52 | 53 | 42 | 45 | 46 | 43 |
| 16/12/2011 01:00 | 49 | 49 | 41 | 45 | 46 | 43 |
| 16/12/2011 02:00 | 49 | 47 | 40 | 45 | 46 | 43 |
| 16/12/2011 03:00 | 50 | 50 | 41 | 45 | 46 | 43 |
| 16/12/2011 04:00 | 51 | 51 | 42 | 45 | 46 | 43 |
| 16/12/2011 05:00 | 55 | 57 | 43 | 45 | 46 | 43 |
| 16/12/2011 06:00 | 58 | 62 | 46 | 46 | 47 | 44 |
| 16/12/2011 07:00 | 61 | 65 | 50 | 50 | 53 | 46 |
| 16/12/2011 08:00 | 62 | 66 | 54 | 57 | 61 | 49 |
| 16/12/2011 09:00 | 63 | 66 | 53 | 56 | 59 | 49 |
| 16/12/2011 10:00 | 62 | 66 | 53 | 54 | 55 | 48 |
| 16/12/2011 11:00 | 62 | 66 | 53 | 52 | 54 | 48 |
| 16/12/2011 12:00 | 62 | 66 | 52 | 53 | 58 | 48 |
| 16/12/2011 13:00 | 62 | 66 | 53 | 54 | 58 | 48 |
| 16/12/2011 14:00 | 63 | 66 | 52 | 53 | 57 | 48 |
| 16/12/2011 15:00 | 63 | 67 | 52 | 52 | 53 | 48 |
| 16/12/2011 16:00 | 63 | 66 | 53 | 52 | 54 | 49 |
| 16/12/2011 17:00 | 62 | 66 | 52 | 53 | 55 | 48 |
| 16/12/2011 18:00 | 62 | 66 | 50 | 51 | 52 | 49 |
| 16/12/2011 19:00 | 61 | 65 | 51 | 51 | 52 | 48 |
| 16/12/2011 20:00 | 60 | 65 | 49 | 48 | 50 | 45 |
| 16/12/2011 21:00 | 59 | 64 | 49 | 48 | 50 | 45 |
| 16/12/2011 22:00 | 58 | 62 | 47 | 45 | 47 | 44 |
| 16/12/2011 23:00 | 56 | 59 | 47 | 46 | 50 | 43 |
| 16/12/2011 00:00 | 56 | 58 | 47 | 59 | 62 | 44 |
| 17/12/2011 01:00 | 56 | 58 | 46 | 56 | 58 | 45 |
| 17/12/2011 02:00 | 55 | 57 | 43 | 45 | 46 | 43 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 17/12/2011 03:00 | 53 | 54 | 42 | 47 | 50 | 44 |
| 17/12/2011 04:00 | 54 | 55 | 46 | 45 | 46 | 44 |
| 17/12/2011 05:00 | 53 | 54 | 44 | 47 | 50 | 43 |
| 17/12/2011 06:00 | 55 | 57 | 43 | 45 | 46 | 43 |
| 17/12/2011 07:00 | 57 | 61 | 44 | 50 | 53 | 44 |
| 17/12/2011 08:00 | 59 | 63 | 47 | 53 | 57 | 47 |
| 17/12/2011 09:00 | 60 | 65 | 49 | 53 | 56 | 49 |
| 17/12/2011 10:00 | 61 | 65 | 50 | 50 | 52 | 46 |
| 17/12/2011 11:00 | 62 | 66 | 52 | 51 | 53 | 47 |
| 17/12/2011 12:00 | 62 | 66 | 52 | 49 | 51 | 47 |
| 17/12/2011 13:00 | 63 | 67 | 52 | 52 | 55 | 47 |
| 17/12/2011 14:00 | 63 | 67 | 52 | 52 | 55 | 46 |
| 17/12/2011 15:00 | 63 | 67 | 53 | 52 | 56 | 47 |
| 17/12/2011 16:00 | 63 | 67 | 53 | 49 | 50 | 46 |
| 17/12/2011 17:00 | 61 | 66 | 52 | 47 | 49 | 46 |
| 17/12/2011 18:00 | 61 | 65 | 51 | 47 | 49 | 46 |
| 17/12/2011 19:00 | 60 | 64 | 50 | 47 | 48 | 46 |
| 17/12/2011 20:00 | 59 | 63 | 49 | 47 | 48 | 46 |
| 17/12/2011 21:00 | 58 | 62 | 49 | 47 | 48 | 45 |
| 17/12/2011 22:00 | 56 | 60 | 46 | 46 | 47 | 45 |
| 17/12/2011 23:00 | 55 | 58 | 44 | 45 | 46 | 44 |
| 17/12/2011 00:00 | 55 | 57 | 45 | 47 | 49 | 44 |
| 18/12/2011 01:00 | 55 | 58 | 46 | 45 | 46 | 44 |
| 18/12/2011 02:00 | 54 | 56 | 45 | 46 | 47 | 44 |
| 18/12/2011 03:00 | 55 | 57 | 45 | 45 | 47 | 44 |
| 18/12/2011 04:00 | 54 | 56 | 43 | 45 | 46 | 43 |
| 18/12/2011 05:00 | 52 | 52 | 43 | 45 | 46 | 43 |
| 18/12/2011 06:00 | 52 | 53 | 40 | 44 | 45 | 42 |
| 18/12/2011 07:00 | 52 | 54 | 41 | 46 | 47 | 43 |
| 18/12/2011 08:00 | 56 | 57 | 45 | 48 | 50 | 44 |
| 18/12/2011 09:00 | 55 | 58 | 44 | 47 | 48 | 44 |
| 18/12/2011 10:00 | 58 | 63 | 45 | 47 | 48 | 45 |
| 18/12/2011 11:00 | 60 | 65 | 48 | 48 | 49 | 46 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 18/12/2011 12:00 | 61 | 66 | 50 | 49 | 50 | 47 |
| 18/12/2011 13:00 | 62 | 66 | 49 | 49 | 50 | 46 |
| 18/12/2011 14:00 | 62 | 66 | 51 | 48 | 50 | 45 |
| 18/12/2011 15:00 | 63 | 67 | 52 | 48 | 49 | 45 |
| 18/12/2011 16:00 | 62 | 66 | 51 | 47 | 48 | 45 |
| 18/12/2011 17:00 | 61 | 66 | 50 | 47 | 48 | 45 |
| 18/12/2011 18:00 | 61 | 66 | 49 | 48 | 50 | 46 |
| 18/12/2011 19:00 | 60 | 65 | 47 | 47 | 49 | 45 |
| 18/12/2011 20:00 | 59 | 64 | 46 | 47 | 49 | 44 |
| 18/12/2011 21:00 | 58 | 63 | 43 | 45 | 47 | 42 |
| 18/12/2011 22:00 | 56 | 59 | 37 | 43 | 45 | 41 |
| 18/12/2011 23:00 | 55 | 57 | 33 | 42 | 45 | 39 |
| 18/12/2011 00:00 | 53 | 55 | 32 | 41 | 43 | 39 |
| 19/12/2011 01:00 | 51 | 51 | 29 | 42 | 45 | 39 |
| 19/12/2011 02:00 | 52 | 50 | 29 | 42 | 45 | 39 |
| 19/12/2011 03:00 | 54 | 54 | 34 | 43 | 46 | 40 |
| 19/12/2011 04:00 | 53 | 52 | 35 | 44 | 46 | 41 |
| 19/12/2011 05:00 | 57 | 60 | 39 | 46 | 49 | 42 |
| 19/12/2011 06:00 | 61 | 65 | 44 | 49 | 51 | 45 |
| 19/12/2011 07:00 | 64 | 68 | 52 | 53 | 55 | 49 |
| 19/12/2011 08:00 | 65 | 69 | 56 | 54 | 56 | 51 |
| 19/12/2011 09:00 | 64 | 68 | 54 | 53 | 56 | 49 |
| 19/12/2011 10:00 | 64 | 68 | 52 | 55 | 58 | 50 |
| 19/12/2011 11:00 | 63 | 68 | 52 | 52 | 55 | 48 |
| 19/12/2011 12:00 | 64 | 68 | 52 | 53 | 57 | 47 |
| 19/12/2011 13:00 | 63 | 67 | 52 | 53 | 58 | 48 |
| 19/12/2011 14:00 | 63 | 67 | 52 | 56 | 59 | 54 |
| 19/12/2011 15:00 | 63 | 67 | 53 | 56 | 57 | 54 |
| 19/12/2011 16:00 | 63 | 67 | 53 | 55 | 57 | 46 |
| 19/12/2011 17:00 | 63 | 66 | 53 | 51 | 54 | 44 |
| 19/12/2011 18:00 | 63 | 67 | 52 | 54 | 56 | 44 |
| 19/12/2011 19:00 | 61 | 65 | 49 | 52 | 55 | 42 |
| 19/12/2011 20:00 | 60 | 65 | 46 | 53 | 54 | 52 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 19/12/2011 21:00 | 58 | 63 | 43 | 54 | 55 | 53 |
| 19/12/2011 22:00 | 57 | 61 | 42 | 53 | 55 | 49 |
| 19/12/2011 23:00 | 55 | 58 | 39 | 41 | 43 | 39 |
| 19/12/2011 00:00 | 54 | 55 | 36 | 41 | 42 | 37 |
| 20/12/2011 01:00 | 53 | 51 | 35 | 38 | 40 | 37 |
| 20/12/2011 02:00 | 50 | 48 | 36 | 39 | 41 | 37 |
| 20/12/2011 03:00 | 50 | 47 | 33 | 39 | 40 | 36 |
| 20/12/2011 04:00 | 54 | 51 | 34 | 39 | 41 | 37 |
| 20/12/2011 05:00 | 56 | 58 | 35 | 44 | 44 | 39 |
| 20/12/2011 06:00 | 60 | 64 | 45 | 45 | 47 | 42 |
| 20/12/2011 07:00 | 63 | 67 | 51 | 49 | 51 | 46 |
| 20/12/2011 08:00 | 64 | 68 | 54 | 52 | 55 | 49 |
| 20/12/2011 09:00 | 64 | 68 | 54 | 53 | 55 | 47 |
| 20/12/2011 10:00 | 63 | 67 | 52 | 53 | 56 | 48 |
| 20/12/2011 11:00 | 64 | 68 | 53 | 51 | 52 | 47 |
| 20/12/2011 12:00 | 64 | 68 | 52 | 52 | 54 | 48 |
| 20/12/2011 13:00 | 63 | 68 | 51 | 53 | 56 | 47 |
| 20/12/2011 14:00 | 63 | 67 | 51 | 55 | 59 | 49 |
| 20/12/2011 15:00 | 64 | 68 | 51 | 55 | 58 | 49 |
| 20/12/2011 16:00 | 64 | 67 | 53 | 51 | 52 | 49 |
| 20/12/2011 17:00 | 64 | 67 | 54 | 51 | 53 | 49 |
| 20/12/2011 18:00 | 64 | 68 | 52 | 50 | 52 | 47 |
| 20/12/2011 19:00 | 62 | 67 | 49 | 49 | 51 | 46 |
| 20/12/2011 20:00 | 61 | 65 | 47 | 47 | 49 | 44 |
| 20/12/2011 21:00 | 60 | 64 | 45 | 45 | 48 | 42 |
| 20/12/2011 22:00 | 58 | 62 | 41 | 44 | 46 | 41 |
| 20/12/2011 23:00 | 57 | 60 | 40 | 45 | 47 | 41 |
| 20/12/2011 00:00 | 56 | 57 | 40 | 45 | 48 | 41 |
| 21/12/2011 01:00 | 53 | 54 | 39 | 46 | 48 | 41 |
| 21/12/2011 02:00 | 53 | 54 | 43 | 48 | 51 | 42 |
| 21/12/2011 03:00 | 51 | 51 | 39 | 45 | 47 | 41 |
| 21/12/2011 04:00 | 55 | 54 | 40 | 46 | 49 | 43 |
| 21/12/2011 05:00 | 57 | 58 | 40 | 46 | 49 | 42 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 21/12/2011 06:00 | 61 | 65 | 46 | 56 | 58 | 51 |
| 21/12/2011 07:00 | 63 | 67 | 53 | 56 | 58 | 50 |
| 21/12/2011 08:00 | 64 | 68 | 55 | 53 | 55 | 48 |
| 21/12/2011 09:00 | 64 | 67 | 54 | 55 | 57 | 52 |
| 21/12/2011 10:00 | 63 | 67 | 52 | 53 | 55 | 46 |
| 21/12/2011 11:00 | 63 | 67 | 52 | 55 | 57 | 49 |
| 21/12/2011 12:00 | 63 | 67 | 52 | 56 | 58 | 54 |
| 21/12/2011 13:00 | 63 | 67 | 52 | 57 | 59 | 54 |
| 21/12/2011 14:00 | 63 | 67 | 53 | 55 | 57 | 49 |
| 21/12/2011 15:00 | 63 | 67 | 53 | 51 | 53 | 48 |
| 21/12/2011 16:00 | 63 | 67 | 54 | 52 | 54 | 49 |
| 21/12/2011 17:00 | 63 | 66 | 55 | 53 | 55 | 49 |
| 21/12/2011 18:00 | 62 | 66 | 52 | 51 | 53 | 47 |
| 21/12/2011 19:00 | 61 | 66 | 50 | 48 | 50 | 46 |
| 21/12/2011 20:00 | 61 | 65 | 49 | 48 | 50 | 45 |
| 21/12/2011 21:00 | 60 | 64 | 48 | 49 | 51 | 46 |
| 21/12/2011 22:00 | 58 | 62 | 48 | 50 | 52 | 47 |
| 21/12/2011 23:00 | 56 | 60 | 45 | 50 | 52 | 46 |
| 21/12/2011 00:00 | 55 | 57 | 44 | 47 | 49 | 44 |
| 22/12/2011 01:00 | 52 | 52 | 41 | 45 | 46 | 44 |
| 22/12/2011 02:00 | 51 | 50 | 41 | 45 | 47 | 44 |
| 22/12/2011 03:00 | 53 | 52 | 43 | 55 | 60 | 44 |
| 22/12/2011 04:00 | 53 | 53 | 43 | 51 | 57 | 45 |
| 22/12/2011 05:00 | 56 | 57 | 44 | 49 | 50 | 46 |
| 22/12/2011 06:00 | 60 | 64 | 48 | 48 | 50 | 46 |
| 22/12/2011 07:00 | 62 | 67 | 50 | 52 | 53 | 49 |
| 22/12/2011 08:00 | 64 | 68 | 55 | 53 | 55 | 50 |
| 22/12/2011 09:00 | 64 | 67 | 54 | 55 | 59 | 50 |
| 22/12/2011 10:00 | 63 | 67 | 51 | 53 | 55 | 49 |
| 22/12/2011 11:00 | 63 | 67 | 53 | 58 | 60 | 54 |
| 22/12/2011 12:00 | 63 | 67 | 52 | 58 | 60 | 52 |
| 22/12/2011 13:00 | 63 | 67 | 52 | 55 | 58 | 50 |
| 22/12/2011 14:00 | 63 | 67 | 53 | 54 | 58 | 50 |

| Date and Start Time | Location N1 | | | Location N2 | | |
|---|---|---|---|---|---|---|
| | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ | $L_{Aeq}$ | $L_{A10}$ | $L_{A90}$ |
| 22/12/2011 15:00 | 63 | 67 | 53 | 53 | 55 | 50 |
| 22/12/2011 16:00 | 64 | 67 | 54 | 53 | 55 | 50 |
| 22/12/2011 17:00 | 63 | 66 | 53 | 51 | 53 | 49 |
| 22/12/2011 18:00 | 63 | 67 | 53 | 51 | 53 | 49 |
| 22/12/2011 19:00 | 62 | 66 | 52 | 51 | 52 | 48 |
| 22/12/2011 20:00 | 61 | 66 | 49 | 49 | 51 | 47 |
| 22/12/2011 21:00 | 60 | 65 | 47 | 49 | 50 | 46 |
| 22/12/2011 22:00 | 59 | 63 | 45 | 49 | 51 | 46 |
| 22/12/2011 23:00 | 57 | 61 | 45 | 49 | 51 | 46 |
| 22/12/2011 00:00 | 56 | 60 | 46 | 49 | 51 | 46 |
| 23/12/2011 01:00 | 56 | 59 | 45 | 47 | 49 | 45 |
| 23/12/2011 02:00 | 55 | 58 | 44 | 47 | 49 | 45 |
| 23/12/2011 03:00 | 55 | 55 | 44 | 47 | 48 | 45 |
| 23/12/2011 04:00 | 56 | 56 | 46 | 47 | 48 | 46 |
| 23/12/2011 05:00 | 57 | 59 | 44 | 47 | 48 | 45 |
| 23/12/2011 06:00 | 59 | 62 | 46 | 48 | 49 | 45 |
| 23/12/2011 07:00 | 61 | 66 | 49 | 49 | 52 | 46 |
| 23/12/2011 08:00 | 63 | 68 | 52 | 53 | 56 | 48 |
| 23/12/2011 09:00 | 63 | 67 | 52 | 53 | 56 | 48 |
| 23/12/2011 10:00 | 63 | 67 | 53 | 52 | 55 | 47 |
| 23/12/2011 11:00 | 63 | 67 | 52 | 49 | 51 | 46 |
| 23/12/2011 12:00 | 63 | 67 | 52 | 50 | 53 | 47 |
| 23/12/2011 13:00 | 63 | 67 | 53 | | | |
| 23/12/2011 14:00 | 63 | 66 | 53 | | | |
| 23/12/2011 15:00 | 63 | 67 | 55 | | | |
| 23/12/2011 16:00 | 63 | 67 | 54 | | | |
| 23/12/2011 17:00 | 62 | 66 | 53 | | | |
| 23/12/2011 18:00 | 62 | 66 | 52 | | | |
| 23/12/2011 19:00 | 61 | 65 | 50 | | | |

**FIGURE 8.1**

Site Layout Showing Noise Survey Locations and nearby Noise Sensitive Locations (NSL)