Environmental Noise Survey at Panda Waste Services

1.0 Introduction

This report deals with the noise monitoring requirement conditions of Panda Waste Services, Waste Licence No. W0140-03.

2.0 Noise Monitoring Survey

The noise survey was carried out in the environs surrounding the waste services facility and close to noise sensitive locations (NSL's) (see map attached). Monitoring was carried out at four locations to determine compliance with respect to NSL's. Weather conditions during monitoring were dry with frost and a light south west wind. The following conditions were adhered to in undertaking the survey:

- Measurement of noise levels from the works was undertaken using Type 1 instruments.
- Cognisance was taken of the EPA s' 'Environmental Noise Survey Guidance Document'2003.
- The survey was carried out in accordance with ISO 1996 Acoustics Description and Measurement of Environmental Noise: Parts 1/2/3.
- Measurements were recorded when all mobile and fixed plant was operating.

2.1 Instrumentation Used

The following instrumentation was used in the noise assessment survey:

- One Larson Davis 870 Precision Integrating Sound Level Analyser/Data logger with 900B Pre-amplifier and 1/2" Condenser Microphone Type 2541.
- One Larson Davis 824 Precision Integrating Sound Level Analyser/Data logger with *Real-Time* Frequency Analyser Facility
- Thee Larson Davis 812 Precision Integrating Sound Level Analyser/Data logger
- Wind Shields Type: Larson Davis WS005-F Windscreen.
- Calibration Type: Larson Davis Precision Acoustic Calibrator Model CA250.

2.2 **Measurement Procedure**

Noise monitoring was carried out on 15th December 2011 during the day-time period (for 30 minute intervals) at 4 NSL's. All the environmental noise analysers had data logging facilities set on real-time, the logged data was later downloaded via a personal computer using software. One-third octave frequency analysis was undertaken at the four locations using the 824 Precision Integrating Sound Level Analyser/Data logger with real-time frequency analyser facility.

The measurement locations were all away from reflecting surfaces and at 1.5m height above local ground. Measurements were carried with all plant in operation.

All acoustic instrumentation was calibrated before and after the survey period and no drift of calibration was observed (calibration level 114dB at 250HZ).

2.3 **Results of Noise Survey**

-sesonth' any other use The results of the noise survey is given in Table 1.0, while the 1/3 Octave frequency analysis data is given in graphical format in the attachment.

Location	Date	Time	Leq	L10	L90	Comments
NSL1	15 th Dec'11	14.40	53.0	55.2	48.2	N2 and slip road traffic. Panda noise source from
						site was indistinguishable from road traffic noise at
						less than 48 dBA
NSL2	15 th Dec'11	15.00	52.1	54.6	47.6	N2 & slip road road traffic. Panda waste site noise
						indistinguishable at less than 47 dBA
NSL3	15 th Dec'11	15.45	70.2	72.8	55.9	N2 road traffic with Panda site noise inaudible at
						less than 54 dBA
NSL4	15 th Dec'11	16.30	67.8	69.9	54.6	N2 road traffic with Panda site noise inaudible at
						less than 54 dBA

Table 1.0 Recorded Noise Levels dB(A) – Intervals 30 minutes

NB Location NSL3 and NSL4 are alongside the high traffic flow primary route (N2)

3.0 Summary/Conclusion

The noise emissions at all the NSL's were inaudible (at less than 48 dBA at NSL1 and NSL2) from 'Panda Waste Services' and well within the terms of their noise emissions limits of 55dBA Leq $_{30min}$. There were no clearly tonal or impulsive noise emissions from the Panda works audible at any of the nearest residences.

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Attachment

1/3 Octave Frequency Analysis

Location map of noise monitoring locations





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Noise Compliance Report: Parda Waste Services

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Figure 1Noise monitoring locations/Noise sensitive locations (NSLs)