

Appendix 6.2 – Baseline Sound Survey



An environmental sound survey was carried out at the nearest residential areas to the site to determine typical baseline levels.

The sound monitoring exercise was carried out over a typical weekday and weekend period during appropriate weather conditions as defined by BS7445-1: 2003.

See attached plan of site (Figure 6.1) which shows the location of the roaming noise measurement position.

Instrumentation

For sound in the vicinity of nearest sensitive property boundary positions to the site, the following instrumentation was used:

Detail of Noise Instrumentation

Manufacturer	Description	Type	Serial No.	Calibration Due Date
Cirrus	Real Time Analyser	CR: 171A	G061253	June 2023
Cirrus	Electronic Calibrator	CR: 513A	031523	April 2023

The following set-up parameters were used on the sound level meters during sound measurements:

Time Weighting: Slow
Frequency Weighting: 'A'
Measurement Period: 15 minutes

Calibration

The noise meters were calibrated with the electronic calibrator prior to commencement and on completion of the survey. No significant drift in calibration was observed.

Survey Dates and Personnel

Sound pressure levels were taken at a spot roaming position monitoring on land adjacent to nearest property boundaries to establish typical background sound data during a Friday daytime through to Sunday night-time period.

The survey was carried out during a morning, afternoon, evening and night-time period at Wharfside Close, Erith on Friday 19th through to Monday 22nd August 2022 by Mr D. R. Kettlewell of Noise & Vibration Consultants Ltd.

Measurements of background sound were recorded at the monitoring position shown on Figure 6.1. Data logging of L_{Aeq} , L_{A10} , L_{A90} and L_{Amax} were recorded over 15-minute intervals.

Observations at site indicated that the noise climate is generally formed by local industry, road traffic and aircraft noise.

Meteorological Conditions



Weather conditions were recorded during the period of the survey and are detailed below:

Friday 19th August 2022

Dry, variable cloud, light westerly winds (1-3m/s), temperature 18-24degC.

Friday 19th to Saturday 20th August 2022

Overnight it remained dry, clear skies, light westerly winds (0-1m/s), temperature 15-20degC.

Daytime periods were dry, sunny during morning period and then turning to variable cloud cover with light west-south-west to south-westerly winds (1-3m/s), temperature 15-23degC.

Saturday 20th to Sunday 21st August 2022

Overnight remained dry, clear skies, light south westerly winds (1-2m/s), temperature 16-19degC. During the daytime period it remained dry, light cloud cover, light southwest winds (1-3m/s), temp. 16-23degC.

Sunday 21st to Monday 22nd August 2022

Overnight it remained dry, light south-south-west winds (1-2m/s), temp. 17-19degC.

The above climatic conditions were suitable for monitoring environmental noise levels in accordance with advice given in BS7445: 2003 'Description and measurement of environmental noise'

Noise Survey Results

The results of background sound analysis taken at the monitoring position is presented within the ES Chapter.

The climatic conditions were suitable for monitoring environmental noise levels in accordance with advice given in BS 7445:2003 'Description and measurement of environmental noise'.



Appendix 6.3 – Baseline Sound Survey Results



Noise Survey Results

Date: Friday 19th August 2022
 Location: Veolia Rainham Landfill, Coldharbour Lane, Rainham, Essex
 Client: Veolia ES (UK) Ltd
 Project: Retention & Extension to PRF & MRF Site
 Data: **Baseline Noise Survey- Position A - Wharfside Close**
 Instrumentation: Cirrus Real Time Analyser 171A (G061253)
 Calibration: 94dB

TABLE 1

Start Time	Run Time (mins.)	LAeq (dB)	LA10 (dB)	LA90 (dB)	LAmx (dB)	Observations
06:00	15:00	50.5	51.4	44.8	63.5	General ambient
06:15	15:00	51.2	52.3	44.4	64.6	General ambient
06:30	15:00	49.4	50.7	46	76.6	Birdsong, general hum of distant traffic
06:45	15:00	50	52.4	46.1	68.4	Noise from local industrial site, vehicle and aircraft noise
Average		50.3	51.7	45.3	64-77	
07:00	15:00	51.4	54.5	46.2	64.7	General 'hum' and birdsong
07:15	15:00	51.3	52.6	47.5	71.1	Local industrial noise
07:30	15:00	49.5	50.8	47.3	66	Local industrial impact noise to the north
07:45	15:00	50	51.7	46.7	69.8	Aircraft and local industrial noise
08:00	15:00	48.5	50.5	45.8	67.1	Aircraft, local vehicle noise
08:15	15:00	47.4	48.9	45.5	55.6	Aircraft and distant traffic noise
08:30	15:00	48.5	50.4	46.1	59.8	Local vehicle noise.
08:45	15:00	48.6	50.2	46.7	56.1	Local industrial noise
09:00	15:00	49.1	51.1	46.7	59.3	Birdsong, general ambient noise & aircraft
09:15	15:00	47.5	48.9	45.4	64.8	General ambient noise
09:30	15:00	49.9	52.7	45.9	66.1	Aircraft and local industrial noise
09:45	15:00	51.6	53.3	47.2	70.4	Car engine noise, aircraft noise, birdsong
10:00	15:00	50.8	52.7	47	68.9	Local industry, vehicle noise
10:15	15:00	50.4	52.2	47.4	66	Aircraft noise, local road traffic, dog barking
10:30	15:00	49.5	51.4	45.6	69.8	Aircraft, birdsong
10:45	15:00	48.9	51.1	45.8	61.7	General ambient noise
Average		49.7	51.6	46.4	56-71	



Noise Survey Results

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 Data: **Baseline Noise Survey- Position A - Wharfside Close**
 Instrumentation: Cirrus Real Time Analyser 171A (G061253)
 Calibration: 94dB

TABLE 2

Start Time	Run Time (mins.)	LAeq (dB)	LA10 (dB)	LA90 (dB)	LAmx (dB)	Observations
15:10	15:00	51.4	53.8	44.6	67.8	Aircraft, local industrial noise
15:25	15:00	52.7	56.1	46.0	71.1	Local vehicle noise, aircraft
15:40	15:00	52.0	55.3	45.5	68.5	General ambient
15:55	15:00	54.5	57.5	45.7	72.2	Bird noise, aircraft
Average		52.8	55.8	45.4	68-72	
20:41	15:00	49.4	51.0	43.6	67.8	Aircraft, general ambient
20:56	15:00	52.1	54.3	43.8	69.2	Aircraft, local vehicle noise
21:11	15:00	49.4	51.3	43.6	66.4	General ambient
21:26	15:00	51.4	52.4	43.0	69.5	General ambient
Average		50.7	52.4	43.5	66-70	
02:50	15:00	49.3	51.6	40.2	63.7	General ambient
03:05	15:00	48.9	50.4	39.7	67.5	General ambient
03:20	15:00	47.6	49.6	38.7	64.3	General ambient
03:35	15:00	48.5	49.3	39.6	65.2	General ambient
Average		48.6	50.3	39.5	64-68	



Noise Survey Results

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 Data: **Baseline Noise Survey- Position A - Wharfside Close**
 Instrumentation: Cirrus Real Time Analyser 171A (G061253)
 Calibration: 94dB

TABLE 3

Start Time	Run Time (mins.)	LAeq (dB)	LA10 (dB)	LA90 (dB)	LAmx (dB)	Observations
07:35	15:00	51.2	53.2	45.2	67.8	General ambient
07:50	15:00	52.2	53.4	44.6	69.2	Aircraft, local vehicle noise
08:05	15:00	51.0	53.8	44.7	67.8	General ambient
08:20	15:00	51.4	54.1	44.8	71.2	Aircraft, bird noise
Average		51.4	53.6	44.8	68-71	
15:12	15:00	51.4	53.8	44.6	69.2	Aircraft, local traffic noise
15:27	15:00	52.7	56.1	44.0	72.2	Distant general port noise
15:42	15:00	52.0	55.3	43.5	71.5	Distant general port noise
15:57	15:00	54.5	57.5	43.7	68.9	Distant general port noise
Average		52.8	55.8	43.9	69-72	
20:30	15:00	52.3	53.4	42.4	68.9	Aircraft, local road traffic
20:45	15:00	51.8	52.7	41.6	65.8	General ambient
21:00	15:00	49.6	50.6	41.4	70.1	General ambient
21:15	15:00	49.8	51.6	41.1	69.2	General ambient
Average		51.0	52.2	41.6	66-70	
02:13	15:00	48.8	51.3	39.4	65.6	General ambient
02:28	15:00	49.2	51.3	39.1	64.7	General ambient
02:43	15:00	48.7	51.1	39.4	62.2	General ambient
02:58	15:00	48.2	50.4	39.5	64.9	General ambient
Average		48.7	51.0	39.3	62-66	



Noise Survey Results

Date: Sunday 21st to Monday 22nd August 2022
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 Client: Veolia ES (UK) Ltd
 Project: Retention & Extension to PRF & MRF Site
 Data: **Baseline Noise Survey- Position A - Wharfside Close**
 Instrumentation: Cirrus Real Time Analyser 171A (G061253)
 Calibration: 94dB

TABLE 4

Start Time	Run Time (mins.)	LAeq (dB)	LA10 (dB)	LA90 (dB)	LAmix (dB)	Observations
08:00	15:00	49.7	51.3	43.2	66.5	General ambient (distant road traffic)
08:15	15:00	49.2	52.0	42.1	64.3	General ambient (distant road traffic)
08:30	15:00	50.2	51.8	41.6	62.7	General ambient (distant road traffic)
08:45	15:00	50.4	52.1	42.4	68.4	Local vehicle noise, aircraft, distant road traffic
Average		49.8	51.8	42.3	64-68	
14:12	15:00	52.6	52.3	43.5	71.1	Aircraft noise
14:27	15:00	52.3	52.9	42.5	69.3	General ambient (distant road traffic)
14:42	15:00	50.8	53.2	43.1	70.2	General ambient (distant road traffic), aircraft
14:57	15:00	50.3	52.4	42.2	68.9	general ambient (distant road traffic)
Average		51.6	52.7	42.8	69-71	
19:02	15:00	50.4	52.7	42.5	69.4	General ambient noise
19:17	15:00	50.8	51.9	42.3	67.7	General ambient noise
19:32	15:00	51.1	52.3	42.7	69.3	General ambient noise
19:47	15:00	49.7	52.8	42.1	70.1	Aircraft noise, distant road traffic
Average		50.5	52.4	42.4	68-70	
00:31	15:00	49.8	51.4	39.9	66.8	General ambient noise
00:46	15:00	50.1	52.2	40.1	64.5	General ambient noise
01:01	15:00	51.3	53.1	39.6	68.7	General ambient noise
01:16	15:00	49.3	51.8	40.2	69.1	General ambient noise
Average		50.1	52.1	39.9	65-69	

Average Morning Periods	50.1	52.1	45.7	56-71
Afternoon Periods	52.4	55	44.2	68-72
Evening Periods	50.7	52.3	42.5	66-70

Daytime Average Overall	50.9	53.1	44.7	56-72
Night-time Average Overall	49.5	51.3	41.9	62-77

