



**KLF RECYCLING HORNSBY PTY LTD
ASQUITH RECYCLING FACILITY**

NOISE COMPLIANCE REPORT ASQUITH FACILITY

2025

14 FEBRUARY 2025

KLF Recycling Hornsby Pty Ltd
Asquith Recycling Facility
Noise Compliance Report Asquith Facility 2025

REVISIONS

Revision	Date	Prepared by	Reviewed by	Revision Comments
1	14 February 2025	Elena Ivanova	Harry Scarlis	



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1 INTRODUCTION

1.1 Overview

KLF Recycling Hornsby Pty Ltd (KLF) operate the Asquith Recycling Facility (the site) under the Environmental Protection Licence (EPL) 20582. The site is located at 7-9 Brennan Close, Asquith NSW.

The noise monitoring purpose was to quantify the acoustic environment and compare site noise levels against specified limits specified in EPL 20582.

Attended environmental noise monitoring described in this report was conducted in general accordance with Conditions L3 of EPL 20582 during the day period of 12 February 2025 at two representative receiver locations.

1.2 Attended monitoring locations

Site monitoring locations are detailed in Table 1-1 and shown on Figure 1-1. It should be noted that Figure 1-1 shows actual monitoring positions, not necessarily the location of residences.

Table 1-1: Attended noise monitoring locations

Monitoring Location	Description	Location	GDA94/MGA56	
			Easting (m)	Northing (m)
A1	Approximately 120 m northwest of the site	7 Wilkinson Close, Hornsby	324726	6269887
A2	Approximately 150 m southwest of the site	3/13 King Road, Hornsby	324765	6269723

1.3 Monitoring Period

Condition L 3.1 of EPL 20582 requires noise monitoring to be undertaken during the day. For the purpose, condition L 3.1 day means the period from:

- Monday – Saturday: 7 am to 6 pm;
- Sundays and Public Holidays: 8 am to 6 pm.





Figure 1-1: Site and noise monitoring locations

2 NOISE LIMITS

2.1 Environmental Protection Licence

This annual monitoring is a requirement as detailed in EPL 20582 dated 9 November 2023. Noise assessment criteria for the site are provided in EPL 20582, condition L3.1. These are specified for the day period at locations which are representative of residences potentially most impacted by site noise. Pages from the site's EPL pertaining to noise are shown in Appendix A. Appendix B provides further information that gives an indication as to how an average person perceives changes in noise level, and examples of common noise levels.

2.2 Noise limits

Noise impact limits from condition L3.1 of EPL 20582 are provided in Table 2-1.

Table 2-1: Noise limits

Monitoring Location Description	Measurement Parameter	Monitoring Frequency	Noise level dB(A)	Requirements
7 Wilkinson Close, Hornsby 2077	L _{Aeq} (15 minutes)	Yearly	49	All residences on Sherbrook Rd and Wilkinson Close, Hornsby
3/13 King Road, Hornsby 2077	L _{Aeq} (15 minutes)	Yearly	52	All other residences

2.3 Meteorological conditions

Condition L3.4 of the EPL states the meteorological conditions which the noise limits apply under:

- L3.4 a) The noise limits set out in condition L3.1 apply under meteorological conditions listed in the table below.
- b) For those meteorological conditions not referred to in condition L3.4(a), the noise limits that apply are the noise limits in condition L3.1 table plus 5 dB.

The table from Condition L3.4 is reproduced in Table 2-2 below.

Table 2-2: Applicable meteorological conditions

Assessment period	Measurement Parameter
Day	Stability Categories A, B, C and D with wind speeds up to and including 0.5 m/s at 10 m above ground level.

Condition L3.5 specifies the source of meteorological data to be used and method for determining stability categories:

- L3.5 For the purpose of condition L3.4:
- a) The meteorological conditions are to be determined from meteorological data obtained from the meteorological weather station identified as Bureau of Meteorology AWS at Terrey Hills, NSW (Station ID 066059).
- b) Stability category shall be determined using the following method from Fact Sheet D of the Noise Policy for Industry (NSW EPA, 2017):
- i. Use of sigma-theta data (section D1.4).

2.4 Other considerations

Monitoring and reporting have been done in accordance with the NSW EPA 'Noise Policy for Industry' (NPfI) issued in October 2017 and the 'Approved methods for the measurement and analysis of environmental noise in NSW' (Approved Methods) issued in January 2022.



3 METHODOLOGY

3.1 Overview

Attended environmental noise monitoring was done in general accordance with Australian Standard AS1055 'Acoustics, Description and Measurement of Environmental Noise' and relevant NSW requirements.

3.2 Attended noise monitoring

Attended noise monitoring was conducted during the day period at each location specified in Table 2-1 of this report. The duration of each measurement was 15 minutes. Measured sound levels from various sources were noted during each measurement and particular attention was paid to the extent of site's contribution (if any) to measured levels. At each monitoring location, the site-only $L_{Aeq,15\text{minute}}$ were measured directly or determined by other methods detailed in Section 7.1 of the NPfl.

All monitoring results noted in this report were due to one or more of the following:

- Site noise levels generated by recycling facility were very low.
- Site noise levels were masked by more dominant sources that are characteristic of the environment (such as breeze in foliage, birdsongs, aircraft or continuous road traffic noise) that cannot be eliminated by monitoring at an alternate or intermediate location.
- It was not feasible or reasonable to employ methods, such as to move closer and back calculate. Cases may include rough terrain preventing closer measurement, addition/removal of significant source to receiver shielding caused by moving closer, and meteorological conditions where back calculation may not be accurate.

If exact noise levels from site could not be established due to masking by other noise sources in a similar frequency range but were determined to be at least 5 dB lower than relevant limits, then a maximum estimate of site may be provided. This is expressed as a 'less than' quantity, such as <20 dB or <30 dB.

3.3 Modifying factors

All measurements were evaluated for potential modifying factors in accordance with the NPfl. Assessment of modifying factors is undertaken at the time of measurement if the site was audible and directly quantifiable. If applicable, modifying factor penalties have been reported and added to measured site-only L_{Aeq} . Low-frequency modifying factor penalties have only been applied to site-only L_{Aeq} levels if the site was the only contributing low-frequency noise source. Specific methodology for assessment of each modifying factor is outlined in Fact Sheet C of the NPfl.

3.4 Instrumentation

Equipment used to measure environmental noise levels is detailed in Table 3-1. Calibration certificates are provided in Appendix C.

Table 3-1: Measurement equipment

Item	Serial Number	Calibration Due
Quest SoundPro Sound Level Meter SE-DL Series	BLJ090016	26/04/2025
QC-10 Sound Calibrator	QIK100070	04/12/2025



4 RESULTS

4.1 Total measured noise levels

Total noise levels measured during each 15-minute attended measurement are provided in Table 4-1.

Table 4-1: Total measured noise levels

Monitoring Location	Start time and Date	L _{Amax} , dB(A)	L _{Aeq} , dB(A)	L _{Amin} , dB(A)	Notes
A1	10:40, 12/02/2025	65.0	51.7	44.7	Site audible. Constant movement of debris, bucket impacts and hum from operation. Other noises included noise from aircraft passing by a low-grade (58-64.3 dB(A)), birdsongs, insects, and distant traffic (constant).
A1	11:00, 12/02/2025	69.0	49.8	44.8	Site audible. Constant movement of debris, bucket impacts and unloading hum from operation. Other noises included noise from residents' activities, birdsongs, insects and distant traffic (constant).
A2	11:25, 12/02/2025	60.7	49.9	43.6	Site audible. Constant movement of debris and hum from operation. Other noises included noise from aircraft passing by a low-grade, breeze in foliage, birdsongs, residents' activities.
A2	11:45, 12/02/2025	65.8	50.5	44.2	Site audible. Constant movement of debris and hum from operation. Other noises included noise from aircraft passing by a low-grade, breeze in foliage, birdsongs and distant traffic.

4.2 Atmospheric conditions

As required by condition L3.5 of the EPL, meteorological data was obtained from the Terrey Hills BoM automatic weather station (AWS) (Station ID 066059) which allowed correlation of atmospheric parameters with measured site noise levels. Attended noise monitoring is not done during rain, hail, or wind speeds above 5 m/s at microphone height. Meteorological conditions recorded by Tery Hill AWS on 12/02/2025 are provided in Table 4-2 below.

Table 4-2: Meteorological conditions (Station ID 066059)

Monitoring Location	Time and Date	Temperature, °C	Wind Speed, km/h	Wind Speed, m/s	Wind Direction
A1	10:30, 12/02/2025	24.3	7	1.9	SSE
A1	11:00, 12/02/2025	24.7	9	2.5	SE
A2	11:30, 12/02/2025	24.5	9	2.5	SSE
A2	12:00, 12/02/2025	25.1	7	1.9	SE

4.3 Compliance Assessment

4.3.1 Modifying factors

There were no modifying factors, as defined in the NPfl, applicable during the survey.



4.3.2 Monitoring results

Attended noise monitoring results are summarised in Table 4-3. The weather data confirmed that EPL standard meteorological conditions (Condition L3.4) were exceeded during all four attended measurements. In accordance with the EPL, noise limits for those periods were those listed in Condition L3.1 plus 5 dB (A). Average wind speed and stability category present during each 15-minute attended measurement are provided in Table 4-3 below.

During the monitoring period that site was operational, typical activities included (confirmed by proponent):

- front end loader;
- one excavator; and
- trucks tipping/being loaded out.

Site operations were audible during all attended measurements, including the constant hum of mobile plant and equipment and “bangs” and “clangs” of material handling. Site contributions were estimated using a combination of operator observations at the time of measurement, filtering of extraneous noise and the application of a low pass filter used to exclude extraneous higher frequency noise such as birdsong and insects.

Site contributions were compliant (below) EPL L_{Aeq} , during all attended day period measurements. Based on a detailed review and analysis of noise measurement data, there was no evidence of low frequency noise, tonality or any other modifying factors as defined in the NPfl (EPA 2017) at any monitoring location.

Table 4-3: Site monitoring results and limits

Monitoring Location	Start time and Date	Wind Speed, m/s	Stability Class	Noise enhancing limits apply ¹	EPL Limits, dB(A)	Site levels, dB(A)	Exceedances, dB(A) ¹
					L_{Aeq} , 15 minutes	L_{Aeq} , 15 minutes	L_{Aeq} , 15 minutes
A1	10:40, 12/02/2025	1.9	A	Y	54 ¹	51.7	Nil
A1	11:00, 12/02/2025	2.5	A	Y	54 ¹	49.8	Nil
A2	11:25, 12/02/2025	2.5	A	Y	57 ¹	49.9	Nil
A2	11:45, 12/02/2025	1.9	A	Y	57 ¹	50.5	Nil

Notes: 1. In accordance with Condition L3.5, where meteorological conditions exceed those specified in Condition L3.4, the EPL limits for these periods are those listed in Condition L3.1 plus 5 dB (A).

Attended noise monitoring observations and results demonstrate that operational noise from the site was audible during all attended measurements.

Noise levels from site complied with relevant limits at all monitoring locations during the February 2025 monitoring period.



Appendix A NOISE PERCEPTION AND EXAMPLES SITE

Noise levels

Table A-1 gives an indication as to how an average person perceives changes in noise level. Examples of common noise levels are provided in Figure A-1.

Table A-1: Perceived change in noise

Change in sound pressure level, dB(A)	Perceived change in noise
Up to 2	Not perceptible
3	Just perceptible
5	Noticeable difference
10	Twice (or half) as loud
15	Large change
20	Four times (or quarter) as loud

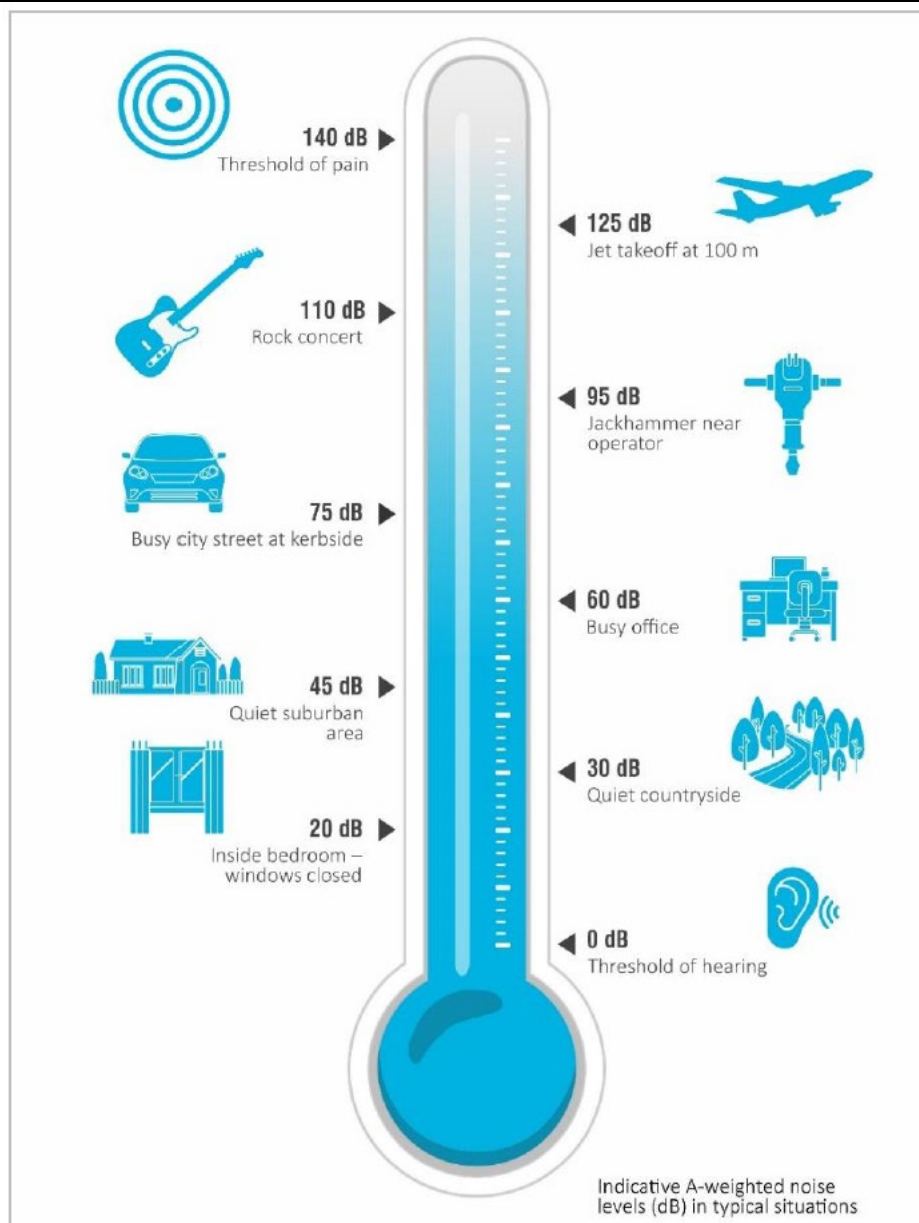


Figure A.1: Common noise levels



Appendix B **EXTRACT OF EPL 20582**



Environment Protection Licence

Licence - 20582

- P1.1 The following points referred to in the table below are identified in this licence for the purposes of weather and/or noise monitoring and/or setting limits for the emission of noise from the premises.

Noise/Weather

EPA identification no.	Type of monitoring point	Location description
1	Noise monitoring	7 Wilkinson Close, Hornsby 2077
2	Noise monitoring	3/13 King Road, Hornsby 2077

3 Limit Conditions

L1 Pollution of waters

- L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

L2 Waste

- L2.1 The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below.

Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below.

Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.

This condition does not limit any other conditions in this licence.

Code	Waste	Description	Activity	Other Limits
NA	Soils	Soils meeting CT1 threshold as defined in the Waste Classification Guidelines	Waste storage	N/A
NA	Office and packaging waste (e.g. paper, cardboard, plastics, glass, metal and timber) that is not mixed with any other type of waste	As defined in Schedule 1 of the POEO Act as in force from time to time	Waste storage	N/A
NA	Garden waste	As defined in Schedule 1 of the POEO Act as in force from time to time	Waste storage	N/A
NA	Wood waste	As defined in Schedule 1 of the POEO Act as in	Waste storage	N/A

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		force from time to time		
NA	Building and demolition waste	As defined in Schedule 1 of the POEO Act as in force from time to time	Waste storage	N/A
NA	Virgin excavated natural material	As defined in Schedule 1 of the POEO Act as in force from time to time	Waste storage	N/A

- L2.2 The quantity of waste that may be accepted at the premises must not exceed 39,000 tonnes per calendar year.
- L2.3 The authorised amount of waste permitted on the premises cannot exceed 3,000 tonnes at any one time.
- L2.4 The licensee must install and maintain a visible permanent stockpile marker that shows the permitted height of stockpiles, being 5 metres (m).
- L2.5 Stockpile heights must not exceed 5 metres (m).
- L2.6 No asbestos waste is to be accepted or stored at the premises.

L3 Noise limits

- L3.1 Noise generated at the premises that is measured at each noise monitoring point established under this licence must not exceed the noise levels specified in Column 4 of the table below for that point during the corresponding time periods specified in Column 1 when measured using the corresponding measurement parameters listed in Column 2.

POINT 1

Time period	Measurement parameter	Measurement frequency	Noise level dB(A)
Day	LAeq (15 minute)	Yearly	49

POINT 2

Time period	Measurement parameter	Measurement frequency	Noise level dB(A)
Day	LAeq (15 minute)	Yearly	52

- L3.2 a) The noise level limits listed for Point 1 in Condition L3.1 apply to all residential receivers on Sherbrook Road and Wilkinson Close, Hornsby 2077.
- b) The noise level limits listed for Point 2 in Condition L3.1 apply to all other residential receivers.

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L3.3 For the purposes of condition L3.1 day means the period from:

- a) 7am to 6pm Monday to Friday
- b) 8am to 1pm Saturday, Sunday and public holidays.

L3.4 a) The noise limits set out in condition L3.1 apply under meteorological conditions listed in the table below.

b) For those meteorological conditions not referred to in condition L3.4 a), the noise limits that apply are the noise limits in condition L3.1 plus 5dB.

Assessment Period	Meteorological Conditions
Day	Stability Categories A, B, C and D with wind speeds up to and including 0.5m/s at 10m above ground level
Evening	Stability Categories A, B, C and D with wind speeds up to and including 0.5m/s at 10m above ground level
Night	Stability Categories A, B, C and D with wind speeds up to and including 0.5m/s at 10m above ground level

L3.5 For the purposes of condition L3.4:

a) the meteorological conditions are to be determined from meteorological data obtained from the meteorological weather station identified as Bureau of Meteorology AWS at Terrey Hills (Station ID 066059).

b) Stability category shall be determined using the following method from Fact Sheet D of the Noise Policy for Industry (NSW EPA, 2017):

- i Use of sigma-theta data (section D1.4).

L3.6 To assess compliance:

a) with the LAeq(15 minutes) noise limits in condition L3.1 and L3.4, the noise measurement equipment must be located:

- (i) approximately on the property boundary, where any residence is situated 30 metres or less from the property boundary closest to premises;
- (ii) in an area within 30 metres of a residence façade, but not closer than 3 metres where any residence on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable,
 - (iii) in an area within 50 metres of the boundary of a National Park or Nature Reserve, or
 - (iv) at any other location identified in condition L3.1

b) with the LAeq(15 minutes) noise limits in condition L3.1 and L3.4, the noise measurement equipment must be located:

- (i) at the reasonably most affected point at a location where there is no residence at the location; or,
- (ii) at the reasonably most affected point within an area at a location prescribed by condition L3.6 (a).

L3.7 A non-compliance of condition L3.1 and L3.4 will still occur where noise generated from the premises is measured in excess of the noise limit at a point other than the reasonably most affected point at the locations referred to in condition L3.6 a) or L3.6 b).

Environment Protection Licence

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NOTE to L3.6 and L3.7: The reasonably most affected point is a point at allocation or within an area at a location experiencing or expected to experience the highest sound pressure level from the premises.

- L3.8 For the purpose of determining the noise generated from the premises, the modifying factor corrections in Table C1 in Fact Sheet C of the Noise Policy for Industry (NSWEPA, 2017) may be applied, if appropriate, to the noise measurements by the noise monitoring equipment.
- L3.9 Noise measurements must not be undertaken where rain or wind speed at microphone level will affect the acquisition of valid measurements.

L4 Hours of operation

- L4.1 The hours of operation at the premises are restricted to the following:

7:00am to 5:00pm - Monday to Friday

8:00am to 1:00pm - Saturday, Sunday and Public Holidays

Please note: These hours also apply to the movements of vehicles to and from the premises for the receipt and dispatch of recycled materials.

L5 Potentially offensive odour

- L5.1 No condition of this licence identifies a potentially offensive odour for the purpose of Section 129 of the Protection of the Environment Operations Act 1997.

Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with conditions of licence directed at minimising odour.

4 Operating Conditions

O1 Activities must be carried out in a competent manner

- O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- a) the processing, handling, movement and storage of materials and substances used to carry out the activity;
and

Appendix C **CALIBRATION CERTIFICATES**





Calibration Certificate

AirMet Scientific P/L
7-11 Ceylon Street
Nunawading
VIC 3131, Australia
Tel: 03 8878 3300
Fax: 03 8878 3344

This document certifies that the instrument detailed has been calibrated to the parameters

Certificate Print Date: 26-Apr-2024 Call ID / Order No: 267963
Calibration Date: 26-Apr-2024 Job No / Pack No: S2679630001
Next Calibration Due: 26-Apr-2025

Customer: AMS SA Rental-ID 399986 **Serial No:** BLJ090016
Description: Sound Level Meter

Calibration Summary

Frequency: Yearly **Temp:** 22°C **As Found:** Out of Tolerance **Result:** Pass
Humidity: 45% **Certificate:** S2679630001

<u>Desc</u>	<u>As Found</u>		<u>As Left (Cal Status)</u>	
	<u>Actual</u>	<u>Result</u>	<u>Actual</u>	<u>Result</u>
114dB	40.0	Fail	114.0	Pass
94dB	94.2	Pass	94.2	Pass

<u>Equip ID</u>	<u>Standard Used</u>	<u>Valid Until</u>	<u>Cert</u>
Service-EIDA020858	<u>Description</u> Questcal Calibrator	11/02/2025	1138282A

Completed By: Prashant Waghela

Signed: 



Calibration Certificate

AirMet Scientific P/L

7-11 Ceylon Street
Nunawading
VIC 3131, Australia
Tel: 03 8878 3300
Fax: 03 8878 3344

This document certifies that the instrument detailed has been calibrated to the parameters

Certificate Print Date: 4-Dec-2024

Call ID / Order No: 274142

Calibration Date: 04-Dec-2024

Job No / Pack No: S2741420001

Next Calibration Due: 4-Dec-2025

Customer: AMS Brisbane Rental-ID 399983

Serial No: QIK100070

Description: QC-10 Sound Calibrator

Calibration Summary

Frequency: 365 Days Temp: 22°C As Found: Out of Tolerance Result: Pass
Humidity: 45% Certificate: S2741420001

<u>Desc</u>	<u>As Found</u>		<u>As Left (Cal Status)</u>	
	<u>Actual</u>	<u>Result</u>	<u>Actual</u>	<u>Result</u>
114 dB @ 1kHz	113.8	Fail	114.0	Pass

<u>Equip ID</u>	<u>Standard Used</u>		<u>Valid Until</u>	<u>Cert</u>
	<u>Description</u>			
00570403	RION NA-28		21/05/2025	SLM39853

Completed By: Kamran Arshad

Signed: _____