



How is noise measured in Lara?

The EPA is responsible for ensuring noise from industry does not impact the surrounding residences and businesses. In doing so, EPA provides guidelines on what the maximum recommended noise levels should be from any local business. These are measured at Noise Sensitive Areas (NSAs) around the Prospect Hill Energy from Waste (EfW) plant. In Lara, the key NSAs are the local residences, the closest of which are on Minyip Road.

These recommended maximum noise levels are determined using a methodology based on the following:

- Land use zones for the emitter and receiver (NSAs)
- Distances between the emitter and receiver
- Background noise levels
- Other existing industrial operations in Lara

Noise Sensitive Area	Effective Recommended Maximum Noise Levels measured in A-weighted decibels (dBA)		
	Day (07:00 to 18:00)	Evening (18:00 to 22:00)	Night (22:00 to 7:00)
Closest residences on Minyip Road	55	49	44

Understanding noise levels

The following diagram¹ provides the typical sound levels associated with commonly heard sounds.

Eardrum Perforation Possible	160	Pistol shot
	150	Fireworks display
Painful Acoustic Trauma	140	Shotgun blast
Painfully Loud	130	Jet engine 25m away, motor racing
	120	Rock concert, thunder
Extremely Loud	110	Car horn, snowblower, Pneumatic Hammer
	100	Blow dryer, subway, helicopter, chainsaw
PROTECT YOUR EARS	85	Prolonged exposure to sounds over 85 dB can be harmful
Very Loud	80	City traffic, loud radio
Loud	70	Car, alarm clock, city traffic
EfW Range	60	Normal conversation
	50	Moderate rainfall
	40	Light rain
	30	Whisper, library
	20	Watch ticking
	dB levels	



Noise levels from the proposed EfW plant

Prospect Hill International has applied a noise model to predict the noise levels from the EfW plant. The noise from the EfW plant would be below limits set by the EPA

On the next page are the results of the modelling which shows the probable noise levels during adverse meteorological conditions (these weather conditions are considered the 'worse-case' scenario).

¹ <http://hearingssense.com.au/causes-of-hearing-loss/>

