



# Noise Analysis



## How is noise measured in the Latrobe Valley?

The EPA is responsible for ensuring noise from industry does not impact the surrounding residences and businesses. In doing so they provide guidelines on what the maximum recommended noise levels should be from any local businesses. These are measured at Noise Sensitive Areas (NSAs) around the Maryvale Mill in each direction - north, south, east, and west.

These are measured using a methodology that takes into account:

- Land use zones for the emitter and receptor (Noise Sensitive Area or NSA)
- Distance between the emitter and receptor
- Background noise levels

The following table provides the EPA's recommended limits for north, south, east, and west of the Maryvale Mill.

Noise Sensitive Areas (NSAs)	Recommended Maximum Noise Levels (set by the EPA)		
	Day (07:00 to 18:00)	Evening (18:00 to 22:00)	Night (22:00 to 7:00)
North	45	39	34
South	54	49	44
East	45	37	32
West	47	42	37



## Understanding noise levels

The following diagram<sup>1</sup> (right) provides the typical sound levels associated with commonly heard sounds.

- 85dB** Prolonged exposure to any noise at or above this level can cause hearing loss
- 110dB** 110dB Regular exposure of more than 1 minute risks permanent hearing loss

Eardrum Perforation Possible	<b>160</b>	Pistol shot
	<b>150</b>	Fireworks display
Painful Acoustic Trauma	<b>140</b>	Shotgun blast
Painfully Loud	<b>130</b>	Jet engine 25m away, motor racing
	<b>120</b>	Rock concert, thunder
Extremely Loud	<b>110</b>	Car horn, snowblower, Pneumatic Hammer
	<b>100</b>	Blow dryer, subway, helicopter, chainsaw
<b>PROTECT YOUR EARS</b>	<b>90</b>	Motorcycle, lawn mower, convertible ride on highway
Very Loud	<b>80</b>	Factory, noisy restaurant, vacuum, screaming child
Loud	<b>70</b>	Car, alarm clock, city traffic
<b>EfW Range</b>	<b>60</b>	Conversation, dishwasher
	<b>50</b>	Moderate rainfall
	<b>40</b>	Refrigerator
	<b>30</b>	Whisper, library
	<b>20</b>	Watch ticking

dB levels

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

