



**GAS IMPORT JETTY AND PIPELINE PROJECT  
ENVIRONMENT EFFECTS STATEMENT  
INQUIRY AND ADVISORY COMMITTEE**

**TECHNICAL NOTE**

**TECHNICAL NOTE NUMBER:** TN 003

**DATE:** 25 September 2020

**LOCATION:** Crib Point Jetty Works and Pipeline Works

**EES/MAP BOOK REFERENCE:** Technical Report H, section 4.3.1.2 and Appendices B and C and New South Wales Interim Construction Noise Guidelines (ICNG).

**SUBJECT:** Response to the RFI 076 – Section 9.1

**SUMMARY** Detail of the background noise measurements used to derive the criteria used for the operation and construction noise assessment.

**REQUEST:** Clarify background noise levels used to calculate ~~operational~~ construction noise limits and Noise from industry in regional Victoria (EPA publication 1411) recommended levels.

**NOTE:**

1. We have understood this question to be referring to construction noise limits, rather than operational limits.

**Background Noise Levels – Construction criteria**

2. A summary of average background levels used to derive the construction noise criteria is summarised in Appendix C of Technical Report H (Noise and Vibration Impact Assessment).
3. These background levels are based on the average measured background noise levels (LA90 dB) in the three assigned land use categories (Rural Land; Rural near roads, Hastings):

Ref	Location	Category	Average Measured Background Noise Level, LA90 dB	
			EVENING	NIGHT
1	25 Mount Ararat Rd South, Nar Nar Goon	Rural near roads	45	36
2	Near 90 Mt Ararat Rd South, Nar Nar Goon	Rural near roads	52	42
3	240 Oakview Ln, Nar Nar Goon	Rural near roads	55	44
4	825 Koo Wee Rup Rd, Pakenham South	Rural near roads	43	35

5	650 Dalmore Rd, Cardinia	Rural near roads	41	32
6	560 Tooradin Station Rd, Tooradin	Rural Land	35	25
7	85 Vowell Dr, Pearcedale	Rural Land	34	26
8	McKirdys Rd, Tyabb	Rural Land	39	32
9	16 Rankin Rd, Hastings	Hastings	39	29
10	1 Edward Ct, Hastings	Hastings	40	29
11	Warringine Park, Bittern	Rural Land	35	29
12	103 The Esplanade, Crib Point	Rural Land	35	26
13	43 Disney Rd, Crib Point	Rural Land	34	22
14	Lorimer St, Crib Point	Rural Land	35	27

4. The following table outlines the values that were used to derive the construction noise criteria for the purpose of undertaking the construction noise assessment:

Category	Average Values for Each Category, $L_{A90}$ dB	
	EVENING	NIGHT
Rural near roads	47	38
Rural	35	27
Hastings	39	29

5. The values presented in this table have been derived using the methodology outlined in section 3.1 of Technical Report H (Noise and Vibration Impact Assessment).
6. The values presented in Section 4.3.1.2 of Technical Report H (Noise and Vibration Impact Assessment) have been derived using the method outlined in EPA Publication 1254. These levels have not been referenced in the impact assessment for brevity.

**Background noise levels – Operational criteria (EPA publication 1411)**

7. The lowest of the average background levels ( $L_{A90}$ ) within Technical Report H (Noise and Vibration Impact Assessment)- (Appendix C) have been used to calculate the operational noise limits (EPA publication 1411) as referenced below:

Average Measured Noise Level, dBA									
Noise Limits	Day			Evening			Night		
	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
Background noise level, $L_{A90}$	33	36	35	32	37	35	23	32	26
Ambient noise level, $L_{Aeq}$	43	55	49	42	55	50	37	48	42

The levels used to calculate the Recommended Maximum Levels are shown below:

Noise-Sensitive Receptor	Reference monitoring site	RECOMMENDED NOISE LEVELS ( $L_{Aeq,30min}$ , DB)		
		Day	Evening	Night
103 The Esplanade	12	33	32	23
43 Disney Street	13	32	31	21
132 The Esplanade	14	31	34	23
220 Oakview Lane 240 Oakview Lane	03	54	52	38
25 Mt Ararat South Road 75 Mt Ararat South Road	02	47	50	38

**CORRESPONDENCE:** Nil

**ATTACHMENTS:** Nil