Fixed-noise Sources Calculations (Operation Phase) at Representative NSRs

NSR1a - Wo Hop Shek San Tsuen

Location	Potential Fixed-noise Sources	SWL/unit, dB(A)		Resultant SWL, dB(A)	Slant Distance, m	Distance Attenuation, dB(A)	Predicted Noise Level at NSR, dB(A)	Tonal Correction, dB(A)	Facade Reflection, dB(A)	Barrier Correction (Screened by Building Structures), dB(A)	Corrected Noise Level at NSR, dB(A)	Resultant Noise Level, dB(A)
New Crematorium Site	Condensers of Split Air-conditioning Units	90	2	93	278.4	-57	36	6	3	-5	40.1	40.5
	Radiators for Cremators	63	9	73	278.4	-57	16	6	3	-5	19.6	
	General Exhaust Air Fans	63	1	63	278.4	-57	6	6	3	-5	10.1	
	Exhaust Fans for Air Pollution Control System	72	9	82	278.4	-57	25	6	3	-5	28.6	

NSR1b - Wo Hop Shek San Tsuen

Location	Potential Fixed-noise Sources	SWL/unit, dB(A)		Resultant SWL, dB(A)	Slant Distance, m	Distance Attenuation, dB(A)	Predicted Noise Level at NSR, dB(A)	Tonal Correction, dB(A)	Facade Reflection, dB(A)	Barrier Correction (Screened by Building Structures), dB(A)	Corrected Noise Level at NSR, dB(A)	Resultant Noise Level, dB(A)
New Crematorium Site	Condensers of Split Air-conditioning Units	90	2	93	286.2	-57	36	6	3	-5	39.9	40.2
	Radiators for Cremators	63	9	73	286.2	-57	15	6	3	-5	19.4	
	General Exhaust Air Fans	63	1	63	286.2	-57	6	6	3	-5	9.9	
	Exhaust Fans for Air Pollution Control System	72	9	82	286.2	-57	24	6	3	-5	28.4	

NSR2 - G/IC Zone

Location	Potential Fixed-noise Sources	SWL/unit, dB(A)		Resultant SWL, dB(A)	Slant Distance, m	Distance Attenuation, dB(A)	Predicted Noise Level at NSR, dB(A)	Tonal Correction, dB(A)	Facade Reflection, dB(A)	Barrier Correction (Screened by Building Structures), dB(A)	Corrected Noise Level at NSR, dB(A)	Resultant Noise Level, dB(A)
New Crematorium Site	Condensers of Split Air-conditioning Units	90	2	93	317.4	-58	35	6	3	-5	39.0	- 39.3
	Radiators for Cremators	63	9	73	317.4	-58	15	6	3	-5	18.5	
	General Exhaust Air Fans	63	1	63	317.4	-58	5	6	3	-5	9.0	
	Exhaust Fans for Air Pollution Control System	72	9	82	317.4	-58	24	6	3	-5	27.5	

Note:

1. The NSRs are screened from the Site by the natural topography and the existing columbarium at Kiu Tau Road. The NSRs have no direct line of sight to the Site.

2. "SWL" denotes as Sound Power Level.

3. As confirmed with the Project Proponent, SWL of the proposed plants that were adopted in the Environmental Impact Assessment Report for the Reprovisioning of Diamond Hill Crematorium were extracted for the noise assessment. The operation plants actually installed in the Diamond Hill Crematorium and their corresponding SWLs are equivalent to that assumed in the EIA submission stage of the Diamond Hill Crematorium as confirmed by the Project Proponent.

4. Tonality correction 6dB(A) was applied to the SPLs as a conservative assumption in this assessment.

5. To allow flexibility for plant locations at the detailed design stage, as the worst cast scenario, it is assumed that all fixed plants are located at the site boundary and will be operated simultaneously.

6. Slant distance between the NSR2 and the site boundary is more than 300 m.