

5.7 NOISE QUALITY STUDY

Baseline studies were conducted at three locations in the study area to determine the existing level of exposure of the various receptors. The locations of the sample stations are listed in table 5.7.15 and the results were compared with Ambient Air Quality Noise in Respect of Noise(AAQSRN) from the Central Pollution Control Board In India(CPCB) as shown in table 5.7.16. Sound pressure level (SPL) measurements were automatically recorded to give the noise level for every hour continuously for 24 hours at the three locations. The results are shown in table 5.7.17.

Table 5.7.15: Location of Monitoring Stations for Noise Pollution

Sample Station	Location	Distance from Project site
NQ1	Project Site	0
NQ2	London Bourne Towers	112m
NQ3	Pier Head	327m

Table 5.7.16: Ambient Air Quality Standards in Respect of Noise (AAQSRN)

Zone Code	Zone	Limits in dB(A) _{Leq}	
		Day Time	Night Time
A	Industrial	75	70
B	Commercial	65	55
C	Residential	55	45
D	Silence	50	40

Source: The Noise Pollution Regulation and Control Rules,2000), CPCB, India

Table 5.7.17: Results from the monitoring stations for noise in the Study Area

Location	Zone	Day Time (6 Am-9Pm)		Night Time(9Pm-6Am)	
		Leq [dB(A)]	Limit [dB(A)]	Leq [dB(A)]	Limit [dB(A)]
NQ1	Commercial	60	65	51	55
NQ2	Residential	50	55	41	45
NQ3	Commercial	59	65	49	55

The L_{eq} for each station was calculated using the formula:

$$L_{eq, \tau} = 10 \log \left(\frac{1}{n} \sum_{i=1}^n 10^{L_i/10} \right)$$

Where, L_i = levels observed at n equally spaced times during interval.

Figure 5.7.9: Noise comparisons for Day time Noise at 3 Locations

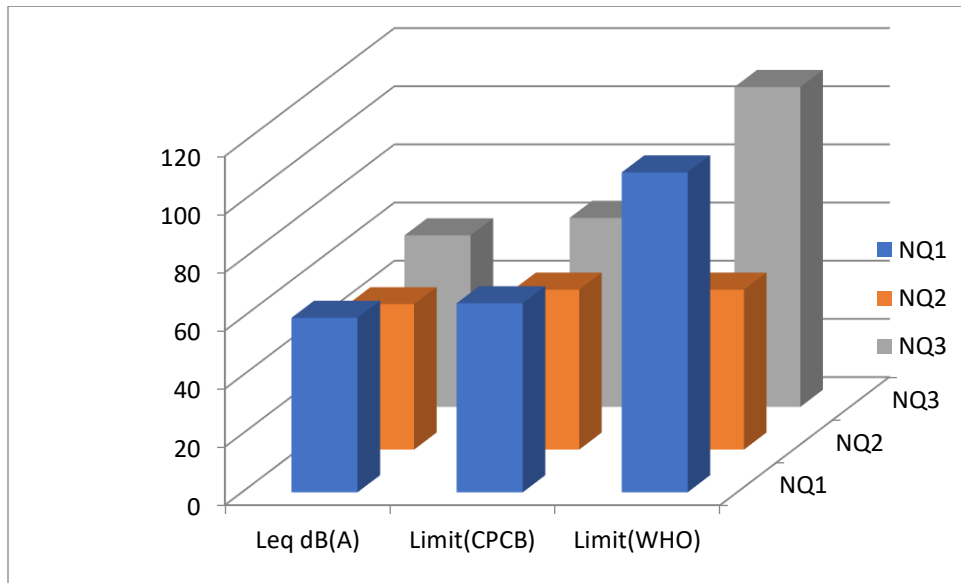


Figure 5.7.10: Noise comparisons for Night time Noise at 3 Locations

