

An Experimental Study of Noise Pollution Level in the Campus of SGTB Khalsa College, University of Delhi, India

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Abstract—SGTB Khalsa college, a member institution of Delhi University is situated at north campus of the University. The campus of the college is perched on the intersection of two busy roads, one of them is a designated highway (NH-44) with heavy traffic throughout the day. The college campus is very much exposed to the noise from these roads. Hence, the present study was conducted with the aim to measure the traffic generated effect on sound pressure level at various sites within the college premises based on the distance from road. The measurement was carried out at different time intervals of the day i.e. in the morning (8-9 AM), midday (12-1 PM), afternoon (3-4 PM) and evening (6-7 PM). The instrument was set to record noise samples at 1-sec intervals during a 03- minute exposure span, from which the equivalent sound level (L_{eq}) was computed. Findings suggest that the present study revealed that the sound levels at various sites in the college exceed the prescribed noise standard set by Central Pollution Control Board (1998) and in comparison, to the control conditions set in the experiment. The results of the analysis also suggest that sound pressure level was highest during the 12-1 PM followed by 3-4 PM due to heavy mobility of vehicles and noise created by the activities in the college campus. Various approaches and strategies are demanded to attenuate the problem.

Keywords: Sound Level, Equivalent sound level, Noise.