

Numfon Yoddee 2014: The Impact Assessment of Noise to Kasetsart University Population on Traffic Road and Green Line Electric Train Project by Management and Noise Analyst Assessment Software. Master of Engineering (Safety Engineering), Major Field: Safety Engineering, Faculty of Engineering. Thesis Advisor: Associate Professor Kiatkrai Ayuwat, M.Eng. 145 pages.

The purpose of this article is to study and evaluate the problems of noise pollution from the traffic and Green Line Electric Train in Kasetsart University area and the effect on people in the surrounding area by using SoundPLAN Software application for management and analysis. It was separated into 3 cases: The first case was to study and evaluate noise distribution around the area outside university boundaries. Noise pollution in this area was caused by traffic on the veriacce roads. The simulation showed that after 24 hours observation using Leq (Equivalent continuous sound level) to evaluate the noise pollution, this area's was 43.2 – 76.3 db(A), which did not exceed the proscribed limit set by The Office of National Environmental Board. It was 87% within the law limit. When comparing this simulation of 47.8 – 78 db(A) Ldn (Day-Night Average Sound Levels) to US.EPA (United States Environmental Protection Agency, it is found that the sound level exceeds this limit by around 72%. The second case was to study and evaluate the effect of noise pollution from the traffic and Green Line Electric Train. Before established Green Line Electric Train, the measurement result was 65.76-81.45 db(A), which did exceed the limit proscribed by the office of National Environmental Board. The areas exceeding this limit was the bus stop near the fence and the entrance to the 6th Honor Anniversary building (veterinarian department). After establishing the Leq of the Green Line Electric Train, an increase of 1.9-4.0 db(A) was shown. The last case was to plan resistance against the noise pollution. An decrease of 0.1-9.8 db(A) was shown after a barrier of 2 meter in height was built.

---

Student's signature

---

Thesis Advisor's signature