THESIS TITLE: THE EVALUATION OF MOTORCYCLE INSPECTION AND

MAINTENANCE PROGRAM IN BANGKOK METROPOLIS

AUTHOR

: MS.NATCHANOK PALA-EN

THESIS ADVISORY COMMITTEE:

Gayana Nathapindhe Chairman

(Assistant Professor Ganjana Nathapindhu)

S Wang mong at Member

(Supat Wangwongwatana, Ph. D.)

Jirapoun Khieuyos Member

(Jiraporn Khiewyoo, Ph. D.)

ABSTRACT

This study was to evaluate the effectiveness of private motorcycle inspection centers, focused on emissions inspection (Carbonmonoxide, Hydrocarbon and Noise Level), in Bangkok metropolis. Four motorcycles which registered in Bangkok and over 5 years were selected for inspection at 30 private motorcycle inspection centers. The evaluators were observed and evaluated the technician practices with the questionairs and the confidential of measurement results should evaluated from the correlation of the emission measure results which measured by the equipment of Pollution Control Department (PCD) compaired with private inspection centers. The data were analyzed by Percent, Mean Value, Standard Deviation, t - test and agreement of Intraclass Correlation Coefficient (ICC).

The study results found that 17 of 30 private motorcycle inspection centers (56.7 %) were not followed by the regulation procedure of Department of Land Transport but given the inspection certificates and 63.6 % have been had the

technician practices scores in the low level which in the range of 4.50 - 13.25 (Total 25 points). The hypothesis test at 0.05 confidential was inacceptable (p - value < 0.05). The private motorcycle inspection centers had not reliability of emission measurement results of Carbonmonoxide and Noise level (ICC value is below 0.50) were 64.2 % and 63.0 %, respectively. It can conclusion that operation and inspection in private motorcycle agencies are not believable more over they still have authorized to give licence.