ABSTRACT

EXHAUST EMISSIONS MODEL MOTOR VEHICLE CAUSED BY TRANSPORT ACTIVITIES (CASE STUDY: RAMAYANA UNDERGROUND TERMINAL OF BANDAR LAMPUNG CITY)

By

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Ramayana Underground Terminal of Bandar Lampung City is one of the largest contributors exhaust emission levels, where the freight car transport activity is very high. Transportation is one of the activities that contribute as a producer of motor vehicle exhaust emissions both gasoline and diesel.

The aim of this study is to make model the relationship between vehicle exhaust emissions with transport activity, to determine the factors that affect emissions, calculate emissions, and calculate the emission losses in rupiah per year in Ramayana Underground Terminal of Bandar Lampung City.

Relationship models obtained from the linear regression equation using SPSS 16 for diesel passenger cars is Y = -19,401 + 0,684 X1 + 11,497 X2 +0,031 X3 and for gasoline passenger cars is Y = 20,060 + 0,143 X1 + 0,421 X2 + 0,028 X3 and for motorcycles is Y = 9,049 + 0,082 X1 + 0,921 X2 + 0,051 X3. Where the exhaust emissions value (Y), the age of the vehicle (X1), vehicle maintenance (X2) and the capacity of the machine (X3). Based on a survey and analysis of the emission load calculations and the cost of damages for Ramayana Underground Terminal worth Rp 63.492.632 / year.

Keywords : Transportation, Gasoline, Diesel, Exhaust Emissions, SPSS 16