

THE ANALYSIS INFLUENCE SUM OF VEHICLES NUMBER TO QUALITY OF AIR AMBIENT AROUND THE PORT AREA IN LAMONG BAY, TANJUNGWANGI PORT AND GRESIK PORT

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Abstract

Transportation is the most dominant sector in Air Pollution Emision. It is considered that gas and dust concentration level comes from motorize vehicles activity. To find out the ambient air quality in study area, the measurement of gas and solid particles degree, as the main pollutant due to its chemist structure is needed. Gas and solid particles degree include Monoxide Carbon (CO), Nitrate Oxidation (NOx), Dioxide Sulphur (SO₂) and dust. However, the result of the measurement cannot predict how kinds of vehicles which influence the decreasing of air quality. Therefore, this study has to do to find how the kinds of vehicles influence the ambient air quality.

The analysis of data using regression analysis which is to find the correlation between kinds of vehicles with Monoxide Carbon (CO), Nitrate Oxidation (NOx), and Dioxide Sulphur (SO₂) which result some equation types. Case study involves arteri street around Lamong Bay, on Banyuwangi and Gresik. Through the analysis result, it can be shown equation type which is $CO = 1,50 + 0,000193 MC - 0,00315 LV + 0,00282 HV$ ($R^2 = 40,8\%$), $NOx = 0,0276 + 0,000004 MC - 0,000030 LV + 0,000025 HV$ ($R^2 = 59,6\%$), $SO_2 = 0.000388 + 0.0000005 MC - 0.000004 LV + 0.000004 HV$ ($R^2 = 51,4\%$).

Key words : Air polution, vehicles, traffic jam, air ambient.