

Analisis pajanan konsentrasi PM_{2,5} dan komposisi PM_{0,25} pada polisi satuan penjaga dan pengatur periode April-Mei tahun 2015 (studi kasus : Jakarta) = Analysis exposure of concentration PM_{0,25} and composition PM_{0,25} on police guard and regulator unit period April-May 2015 (study case: Jakarta) / Eka Fitriani Ahmad

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Abstrak

[ABSTRAK

Pencemaran udara memiliki dampak yang sangat merugikan, salah satunya adalah para polisi jalan raya yang selama bekerja terpajan udara tercemar. Penelitian ini akan mengkaji partikulat udara, black carbon dan unsur logam dari personal monitoring pada polisi jalan raya khususnya polisi satuan penjaga dan pengatur yang bertujuan untuk menentukan konsentrasi serta komposisi dari partikulat sehingga dapat dijadikan referensi berbasis ilmiah sebagai langkah untuk membuat keputusan dan kebijakan yang tepat dalam menanggulangi resiko dari penyakit akibat terpajan ditempat kerja.

Metode yang digunakan dalam penelitian ini adalah analisis Gravimetri untuk mengetahui konsentrasi dari partikulat serta analisis refaktorimeter dan EDXRF untuk mengetahui komposisi yang terdapat pada partikulat yang memajan polisi di jalan raya khususnya polisi satuan penjaga dan pengatur. Hasil yang diperoleh pada konsentrasi PM_{2,5} belum melebihi baku mutu OSHA maupun ACGIH namun telah melebihi baku mutu harian dari PP No. 41 Tahun 1999 yaitu 65 μg/m³ , USPA 65 μg/m³ dan WHO 25 μg/m³. Untuk Komposisi black carbon dan unsur logam belum melebihi baku mutu ACGIH 300 μg/m³. Sedangkan Konsentrasi Pb telah melebihi baku mutu yang telah ditetapkan USEPA yaitu 0,15 μg/m³.

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ABSTRACT

Air pollution has very harmful effects, one of which is the highway police particularly The Guard and Regulator Unit which are exposed to polluted air during work. This study examine airborne particulates, carbon black and metal elements from personal monitoring of the highway police, especially police guard and regulator unit aiming to determine the concentration and composition of particulate matter that can be used as scientific reference as a step to make the right decisions and policy in tackling the risk of disease due to exposure in the workplace.

The method used in this research is the analysis Gravimetry to determine the concentration of particulates and refaktorimeter and EDXRF analysis to determine the composition contained in the particulates which exposes traffic police. Results obtained at a concentration of PM_{2.5} has not exceeded the quality standard OSHA or ACGIH but have exceeded the daily quality 65 μg/m³ based on PP 41, 1999, 65 μg/m³ based on USPA and 25 μg/m³ based on WHO. For the composition of black carbon and metal elements have not exceeded the standard quality 300 μg/m³. But concentration Pb in particulate matter with a concentration of 0.28 ug / m³ which has exceeded the value of the quality standard USEPA, Air pollution has very harmful effects, one of which is the highway police particularly The Guard and Regulator Unit which are exposed to polluted air during work. This study examine airborne particulates,

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