Gambaran pajanan particulate matter (pm10, pm2.5, pm1 dan pm0.25) di Pusat Pengujian Bendaraan bermotor unit Cilincing, Jakarta Utara tahun 2017 = Evaluation of particulate matter (pm10 pm2.5 pm1 dan pm0.25) exposure in Pusat Pengujian Kendaraan Bermotor Cilincing unit North Jakarta in 2017

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Abstrak

Pajanan partikulat dapat menyebabkan gangguan kesehatan pada sistem pernapasan dan kardiovaskular serta kematian. Tujuan penelitian ini mengetahui konsentrasi pajanan partikulat di PKB Cilincing. Pengambilan data dilakukan dengan mengukur pajanan personal pada petugas uji mekanis dan area pada kantor dan pengujian. Rata-rata konsentrasi pajanan personal PM10, PM2.5, PM1, PM0.25 pada petugas uji mekanis : 342.26 g/m3; 232.23 g/m3; 190.58 g/m3; dan 140.10 g/m3, ruangan kantor : 208.05 g/m3; 168.87 g/m3; 149.18 g/m3; 110.42 g/m3, dan pengujian : 213,50 g/m3; 130.24 g/m3; 100,42 g/m3; 47,25 g/m3. Perbedaan konsentrasi pajanan partikulat dapat terjadi karena perbedaan ukuran dan jenis kendaraan, lokasi, serta jenis pengujian.

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Exposure to vehicle emission particulates has been known to cause death and health effects on respiratory and cardiovascular systems. This study conducted to determine concentration of PM2.5 in Vehicle Emission Testing Centre, Cilincing unit, by collecting personal exposure on emission inspector, at office and testing area. Average personal exposure concentration of PM10, PM2.5, PM1, PM0.25 were 342.26 g m3 232.23 g m3 190.58 g m3 dan 140.10 g m3, office area 208.05 g m3 168.87 g m3 149.18 g m3 110.42 g m3 testing area 213,50 g m3 130.24 g m3 100,42 g m3 47,25 g m3. Concentration of particulate matter may different due to size and types of vehicles, location, and types of vehicle testing.