

**ANALISIS KADAR TIMBAL (Pb) TERHADAP KEBIASAAN
MEROKOK PADA OPERATOR SPBU
DI KELURAHAN MARGAHAYU
BEKASI TIMUR**

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ABSTRAK

Pencemaran timbal (Pb) di udara diakibatkan oleh emisi kendaraan bermotor yang berasal dari pembakaran Pb-alkali pada bahan bakar yang dapat terhirup oleh manusia. Kebiasaan merokok yang tinggi serta udara yang telah terkontaminasi timbal dari hasil gas buangan kendaraan yang dihisap secara bersamaan dengan asap rokok, dapat meningkatkan kadar timbal (Pb) di dalam tubuh. SPBU merupakan tempat yang memiliki resiko tertinggi terpapar secara terus menerus oleh timbal (Pb). Tujuan dari penelitian ini adalah Untuk mengetahui Kadar Timbal (Pb) Pada Sampel Rambut Terhadap Kebiasaan Merokok Pada Operator SPBU di Kelurahan Margahayu Bekasi Timur. Jenis penelitian ini bersifat Deskriptif kuantitatif berbasis laboratorium menggunakan data primer dengan pendekatan *cross-sectional*. Penelitian ini dilakukan di 6 SPBU Kelurahan Margahayu Bekasi Timur sebanyak 10 responden kadar timbal (Pb) dalam sampel rambut di ukur menggunakan ICP-MS (*Inductively Coupled Plasma-Mass Spectrometry*) pada panjang gelombang 209 nm. Hasil penelitian menunjukkan kadar timbal (Pb) tertinggi sebesar 7,03 µg/g dan terendah sebesar 1,67 µg/g. Dari hasil penelitian dapat disimpulkan Analisis uji regresi linier berganda didapatkan satu variabel yang berhubungan dengan kadar timbal (Pb) dalam rambut operator SPBU yaitu usia atau umur dan tidak menunjukkan adanya pengaruh terhadap kebiasaan merokok seperti lama merokok dan konsumsi rokok,serta lama berkerja, frekuensi bekerja terhadap kadar timbal pada sampel rambut.

Kata kunci : Kadar Timbal (Pb), Rambut Operator SPBU, *ICP-MS*

ABSTRACT

Lead (Pb) pollution in the air is caused by motor vehicle emissions from burning Pb-alkali in fuel that can be inhaled by humans. High smoking habits and air that has been contaminated with lead from vehicle exhaust gases that are inhaled simultaneously with cigarette smoke, can increase lead (Pb) levels in the body. Gas stations are places that have the highest risk of being continuously exposed to lead (Pb). The purpose of this study was to determine the level of lead (Pb) in hair samples on smoking habits at gas station operators in Margahayu Village, East Bekasi. This type of research is descriptive quantitative laboratory-based using primary data with a cross-sectional approach. This research was conducted at 6 gas stations in Margahayu Village, East Bekasi, with 10 respondents the levels of lead (Pb) in hair samples were measured using ICP-MS (Inductively Coupled Plasma-Mass Spectrometry) at a wavelength of 209 nm. The results showed that the highest lead (Pb) was 7.03 g/g and the lowest was 1.67 g/g. From the results of the study, it can be concluded that the multiple linear regression analysis found one variable related to the level of lead (Pb) in the hair of gas station operators, namely age or age and did not show any influence on smoking habits such as duration of smoking and cigarette consumption, as well as length of work, frequency of work. on lead levels in hair samples.

Keywords : Level of Lead (Pb), Hair of Gas Station Operator, ICP-MS