

ABSTRAK

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ANALISIS RISIKO PAPARAN GAS KARBON MONOKSIDA PADA
PETUGAS SPBU (Studi Kasus Di SPBU X dan SPBU Y Kota Surabaya)

1x + 86 Halaman + 14 Tabel + 5 Lampiran

Stasiun Pengisian Bahan Bakar Umum memiliki risiko tinggi terjadinya paparan gas karbon monoksida yang diakibatkan oleh antrean kendaraan bermotor saat melakukan pengisian bahan bakar. Kondisi tersebut menimbulkan keluhan kesehatan pada petugas seperti pusing, mual, dan sesak nafas. Tujuan dari penelitian ini adalah untuk menilai risiko kesehatan lingkungan yang berhubungan dengan paparan gas karbon monoksida pada petugas SPBU di SPBU X dan SPBU Y di Kota Surabaya.

Penelitian observasional ini menggunakan pendekatan *cross sectional*. Jumlah responden sebanyak 27 orang, menggunakan metode *purposive sampling*. Analisis risiko merupakan pendekatan analisis data yang digunakan untuk menilai risiko pada manusia. Berdasarkan pedoman ARKL, tingkat risiko dianggap aman jika nilai $RQ \leq 1$, dan tingkat risiko dianggap tidak aman jika nilai $RQ > 1$.

Hasil penelitian ini, didapatkan hasil pengukuran karbon monoksida udara di 2 SPBU masih berada di bawah NAB berdasarkan Permenaker No. 5 Tahun 2018. Nilai rata-rata asupan akibat paparan karbon monoksida di SPBU X sebesar 0,49 mg/kg/hari dan SPBU Y sebesar 0,585 mg/kg/hari. Nilai RQ pada SPBU X adalah $RQ 0,723 \leq 1$ dan SPBU Y adalah $RQ 0,87 \leq 1$.

Kesimpulan penelitian ini bahwa sebanyak 27 responden dinyatakan tidak berisiko terhadap paparan gas karbon monoksida. Untuk mengurangi jumlah paparan yang terhirup, petugas disarankan untuk menggunakan masker.

Kata Kunci : ARKL, karbon monoksida, SPBU

Daftar Bacaan : 48 (38 Jurnal, 4 Peraturan, 6 Buku)

ABSTRACT

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RISK ANALYSIS OF CARBON MONOXIDE GAS EXPOSURE IN GAS STATION ATTENDANTS (Case Study at Gas Station X and Gas Station Y in Surabaya City)

1x + 86 Pages + 14 Tables + 5 Appendices

Public Fuel Filling Stations has a high risk of carbon monoxide gas exposure caused by queuing motor vehicles while refueling. This condition causes health complaints in officers such as dizziness, nausea, and shortness of breath. The goal of this study was to assess the environmental health risks associated with carbon monoxide gas exposure among gas station attendants at Gas Stations X and Y in Surabaya City.

This observational study used a cross sectional approach. The number of respondents was 27 people, using purposive sampling method. Risk analysis was a data analytic approach used to assess attendants risk. Based on ARKL guidelines, the risk level was considered safe if the RQ value was ≤ 1 , and the risk level was considered unsafe if the RQ value was > 1 .

The results of this study, obtained measurements of air carbon monoxide at 2 gas stations were still below the NAB based on Permenaker No. 5 of 2018. The average intake value due to carbon monoxide exposure at Gas Station X was 0.49 mg/kg/day and Gas Station Y was 0.585 mg/kg/day. The RQ value at Gas Station X was $RQ\ 0.723 \leq 1$ and Gas Station Y was $RQ\ 0.87 \leq 1$.

The conclusion of this study was that many as 27 respondents were declared not at risk of exposure carbon monoxide gas. To reduce the amount of exposure inhaled, officers were advised to use masks.

Keywords : ARKL, carbon monoxide, gas station

References : 48 (38 Journals, 4 Regulations, 6 Books)