

**Lampiran 10.** Contoh perhitungan *intake*/asupan

**Lokasi : Terminal Giwangan**

**Responden : Pedagang no. 1**

**Diketahui :**

$$C_{pb}(\text{weekdays}) = 0,000172 \text{ mg/m}^3$$

$$C_{pb}(\text{weekend}) = 0,000124 \text{ mg/m}^3$$

$$R = 20 \text{ m}^3/\text{hari}$$

$$T_e = 15 \text{ jam/hari}$$

$$F_e(\text{weekdays}) = 246 \text{ hari/tahun}$$

$$F_e(\text{weekend}) = 104 \text{ hari/tahun}$$

$$D_t = 30 \text{ tahun}$$

$$W_b = 70 \text{ Kg}$$

$$t_{avg} = 30 \text{ tahun} \times 365 \text{ hari/tahun} = 10950 \text{ hari}$$

$$I = \frac{C \times R \times T_e \times F_e \times D_t}{W_b \times t_{avg}}$$

$$I_{\text{weekdays}} = \frac{0,000172 \frac{\text{mg}}{\text{m}^3} \times 20 \frac{\text{m}^3}{\text{hari}} \times 15 \frac{\text{jam}}{\text{hari}} \times 246 \frac{\text{hari}}{\text{tahun}} \times 30 \text{ tahun} \times \frac{1 \text{ hari}}{24 \text{ jam}}}{70 \text{ Kg} \times 10950 \text{ hari}} = 0,0000207 \text{ mg/kg.hari}$$

$$I_{\text{weekend}} = \frac{0,000124 \frac{\text{mg}}{\text{m}^3} \times 20 \frac{\text{m}^3}{\text{hari}} \times 15 \frac{\text{jam}}{\text{hari}} \times 104 \frac{\text{hari}}{\text{tahun}} \times 30 \text{ tahun} \times \frac{1 \text{ hari}}{24 \text{ jam}}}{70 \text{ Kg} \times 10950 \text{ hari}} = 0,0000063 \text{ mg/kg.hari}$$

$$\text{Intake total} = I_{\text{weekdays}} + I_{\text{weekend}}$$

$$\text{Intake total} = 0,0000207 \text{ mg/kg.hari} + 0,0000063 \text{ mg/kg.hari} = 0,0000269 \text{ mg/kg.hari}$$

**Responden : Petugas tiket no. 1**

**Diketahui :**

$$C_{pb}(\text{weekdays}) = 0,000153 \text{ mg/m}^3$$

$$C_{pb}(\text{weekend}) = 0,000146 \text{ mg/m}^3$$

$$R = 20 \text{ m}^3/\text{hari}$$

$$T_e = 12 \text{ jam/hari}$$

$$F_e(\text{weekdays}) = 246 \text{ hari/tahun}$$

$$F_e(\text{weekend}) = 104 \text{ hari/tahun}$$

$$Dt = 1 \text{ tahun}$$

$$Wb = 54 \text{ Kg}$$

$$t_{\text{avg}} = 30 \text{ tahun} \times 365 \text{ hari/tahun} = 10950 \text{ hari}$$

$$I = \frac{C \times R \times Te \times Fe \times Dt}{Wb \times t_{\text{avg}}}$$

$$I \text{ weekdays} = \frac{0,0001496 \frac{\text{mg}}{\text{m}^3} \times 20 \frac{\text{m}^3}{\text{hari}} \times 12 \frac{\text{jam}}{\text{hari}} \times 246 \frac{\text{hari}}{\text{tahun}} \times 1 \text{ tahun} \times \frac{1 \text{ hari}}{24 \text{ jam}}}{54 \text{ Kg} \times 10950 \text{ hari}} = 6,3 \times 10^{-7} \text{ mg/kg.hari}$$

$$I \text{ weekend} = \frac{0,0001496 \frac{\text{mg}}{\text{m}^3} \times 20 \frac{\text{m}^3}{\text{hari}} \times 12 \frac{\text{jam}}{\text{hari}} \times 104 \frac{\text{hari}}{\text{tahun}} \times 1 \text{ tahun} \times \frac{1 \text{ hari}}{24 \text{ jam}}}{54 \text{ Kg} \times 10950 \text{ hari}} = 2,58 \times 10^{-7} \text{ mg/kg.hari}$$

$$\text{Intake total} = I \text{ weekdays} + I \text{ weekend}$$

$$\text{Intake total} = 6,3 \times 10^{-7} \text{ mg/kg.hari} + 2,58 \times 10^{-7} \text{ mg/kg.hari} = 8,94 \times 10^{-7} \text{ mg/kg.hari}$$

### **Responden : Penumpang no. 1**

**Diketahui :**

$$C_{\text{pb}} (\text{weekdays}) = 0,000172 \text{ mg/m}^3$$

$$C_{\text{pb}} (\text{weekend}) = 0,000124 \text{ mg/m}^3$$

$$R = 20 \text{ m}^3/\text{hari}$$

$$Te = 1 \text{ jam/hari}$$

$$Fe = 3 \text{ hari/tahun}$$

$$Dt = 1 \text{ tahun}$$

$$Wb = 50 \text{ Kg}$$

$$t_{\text{avg}} = 30 \text{ tahun} \times 365 \text{ hari/tahun} = 10950 \text{ hari}$$

$$I = \frac{C \times R \times Te \times Fe \times Dt}{Wb \times t_{\text{avg}}}$$

$$I \text{ weekdays} = \frac{0,000172 \frac{\text{mg}}{\text{m}^3} \times 20 \frac{\text{m}^3}{\text{hari}} \times 1 \frac{\text{jam}}{\text{hari}} \times 3 \frac{\text{hari}}{\text{tahun}} \times 1 \text{ tahun} \times \frac{1 \text{ hari}}{24 \text{ jam}}}{50 \text{ Kg} \times 10950 \text{ hari}} = 7,8 \times 10^{-10} \text{ mg/kg.hari}$$

$$I \text{ weekend} = \frac{0,000124 \frac{\text{mg}}{\text{m}^3} \times 20 \frac{\text{m}^3}{\text{hari}} \times 1 \frac{\text{jam}}{\text{hari}} \times 3 \frac{\text{hari}}{\text{tahun}} \times 1 \text{ tahun} \times \frac{1 \text{ hari}}{24 \text{ jam}}}{50 \text{ Kg} \times 10950 \text{ hari}} = 5,7 \times 10^{-10} \text{ mg/kg.hari}$$