

Unit conversion

Slide#6 solution)

$$10 \text{ ppb} = 0.01 \text{ ppm}$$

$$\text{MW of } SO_2 = 64.1$$

$$SO_2 \text{ conc. in } \mu\text{g}/\text{m}^3$$

$$= 0.01 \text{ ppm} \times 64.1 \text{ g/mole} \times \frac{1 \text{ atm}}{8.21 \times 10^{-5} \text{ m}^3 \cdot \text{atm/K} \cdot \text{mole} \times 293 \text{ K}}$$

$$= 26.6 \mu\text{g}/\text{m}^3$$