

$$GHG_i = \sum_j [N_j \times EF_j \times t_j] \times MF_i \times \rho_i \times 0.001$$

Where:

GHG_i = Annual emissions of greenhouse gas i attributable to low bleed or intermittent bleed natural gas pneumatic device venting, in metric tons;

j = Type of low bleed or intermittent bleed natural gas pneumatic device;

N_j = Number of pneumatic devices j determined in accordance with QC.29.4.2;

EF_j = Emission factor for pneumatic device j as specified in Tables 29-1 and 29-2 in QC.29.6, in cubic metres per hour at standard conditions, either

- indicated in Table 29-1, 29-2 or 29-6 in QC.29.6, for low bleed or intermittent bleed pneumatic devices that maintain operating conditions such as liquid level, pressure, pressure differential or temperature, or

- provided by the manufacturer for intermittent bleed pneumatic devices used for compressor startup;

t_j = Annual operating time for pneumatic device j , in hours;

MF_i = Molar fraction of greenhouse gas i in natural gas, determined in accordance with paragraph 3 of QC.29.4;

ρ_i = Density of greenhouse gas i , of 1.893 kg per cubic metre for CO_2 and 0.690 kg per cubic metre for CH_4 at standard conditions;

0.001 = Conversion factor, kilograms to metric tons;

$i = CO_2$ or CH_4 .