

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

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

- calculated using equation 29-5.1, for intermittent bleed pneumatic devices;

- provided by the manufacturer for operating conditions for intermittent bleed pneumatic devices used for compressor startup.

When that data is not available, use the data for a similar device. The emitted start-up gas volume provided by the device manufacturer may be used to replace the  $[EF_j \times t_j]$  product in the equation;

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

$\rho_i$  = Density of greenhouse gas  $i$  that is 1.830 kg per cubic metre for CO<sub>2</sub> and 0.668 kg per cubic metre for CH<sub>4</sub> at standard conditions;

0.001 = Conversion factor, kilograms to metric tons;

$i$  = CO<sub>2</sub> or CH<sub>4</sub>.