$$GHG_i = \sum_{j=1}^{n}\left[N_j \times EF_j \times t_j\right] \times MF_i \times \rho_i \times 0.001$$

Where:

GHG_i = Annual emissions of greenhouse gas i, for each source of fugitive emissions, in metric tons;

n = Total number of types of components, by fugitive emission source;

j = Type of component;

N_j = Total number of components of type j;

EF_j = Emission factor for leaks from each type of component j, determined in accordance with paragraph 1 of QC.33.4.16, in cubic metres per hour at standard conditions;

t_j = Duration of leakage from component j, determined in accordance with paragraph 2 of QC.33.4.16, in hours;

MF_i = Molar fraction of greenhouse gas i in the gas from reciprocating compressor venting, determined in accordance with paragraph 3 of QC.33.4;

ρ_i = Density of greenhouse gas i that is 1.830 kg per cubic metre for CO_2 and 0.668 kg per cubic metre for CH_4 at standard conditions;

0.001 = Conversion factor, kilograms to metric tons;

i = CO_2 or CH_4.