$$GHG_i = \sum_j \left(V_{ve-s} + V_{ve-ss} - V_{CO2-N2} - V_{res}\right)_j \times MF_i \times \rho_i \times 0.001$$

Where:

GHG_i = Annual emissions of greenhouse gas i attributable to gas well venting during completions or workovers, in metric tons;

j = Gas well;

V_{ve-s} = Quantity of natural gas emitted during sonic flow conditions from venting of well j, calculated in accordance with subparagraph a, in cubic metres at standard conditions;

V_{ve-ss} = Quantity of gas emitted during subsonic flow conditions from venting of well j, calculated in accordance with subparagraph b, in cubic metres at standard conditions;

V_{CO2-N2} = Quantity of CO_2 or N_2 injected into well j during completion or workover, in cubic metres at standard conditions;

V_{res} = Quantity of natural gas from well j sent to the transmission or distribution system during completion or workover, in cubic metres at standard conditions;

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

p_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;