

$$GHG_i = N \times EF_i \times \rho_i \times 0.001$$

Where:

GHG_i = Annual emissions of greenhouse gas *i* attributable to reciprocating compressor venting to the atmosphere, in metric tons;

N = Total number of reciprocating compressors;

EF_j = Emission factor, namely 15.2 m³ for CO₂ and 272.7 m³ for CH₄, at standard conditions;

ρ_i = Density of greenhouse gas *i* that is 1.893 kg per cubic metre for CO₂ and 0.690 kg per cubic metre for CH₄ at standard conditions;

0.001 = Conversion factor, kilograms to metric tons;

i = CO₂ or CH₄;