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

Where:

 GHG_i = Annual emissions of greenhouse gas i attributable to atmospheric centrifugal compressor vents, in metric tons;

N = Total number of centrifugal compressors;

EF₁ = Emission factor, namely 15,234.5 m³ for CO₂ and 345,465.5 m³ for CH₄, at standard conditions;

 ρ_i = Density of greenhouse gas *i* that is 1.830 kg per cubic metre for CO₂ and 0.668 kg per cubic metre for CH₄ at standard conditions;

0.001 = Conversion factor, kilograms to metric tons;

 $i = CO_2$ or CH_4 ;