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

Where:

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

N = Total number of centrifugal compressors;

EF_j = Emission factor, namely 15,234.5 m^3 for CO_2 and 345,465.5 m^3 for CH_4, at standard conditions;

ρ_i = Density of greenhouse gas *i* that is 1.893 kg per cubic metre for CO_2 and 0.690 kg per cubic metre for CH_4 at standard conditions;

0.001 = Conversion factor, kilograms to metric tons;

i = CO_2 or CH_4;