

Figure: 30 TAC §117.423(b)(5)

$$C_{instack} = A_{NO_x} \times \left(1 - \frac{\%H_2O}{100}\right) \times \left[\left(20.9 - \frac{\%O_2}{\left(1 - \frac{\%H_2O}{100}\right)}\right) \times \frac{1}{5.9} \right]$$

$$Cap_{GT} = C_{instack} \times MF \times \left(\frac{46}{28} \times 10^{-6}\right)$$

Where:

$C_{instack}$ = the nitrogen oxides (NO_x) in-stack concentration in parts per million by volume (ppmv);

A_{NO_x} = the applicable NO_x emission specification of §117.405 or §117.410 of this title (expressed in parts per million by volume NO_x at 15% oxygen (O₂), dry basis);

%H₂O = the volume percent of water in the stack gases, as calculated from the manufacturer's data, or other data as approved by the executive director, at megawatt (MW) rating and International Standards Organization (ISO) flow conditions;

%O₂ = the volume percent of O₂ in the stack gases on a wet basis, as calculated from the manufacturer's data or other data as approved by the executive director, at MW rating and ISO conditions;

Cap_{GT} = source cap allowable emission rate in pounds per hour; and

MF = the turbine manufacturer's rated exhaust flow rate, in pounds per hour at MW rating and ISO flow conditions.