

Figure: 30 TAC §112.103(2)(C)(ii)

$$SO_2 = H_2Smc \times \frac{Scc}{H_2Ssc} \times FFa \times \frac{Tsc}{Ta} \times \frac{Pa}{Psc} \times \frac{lb\ mole}{385.27\ scf} \times \frac{64.06\ lb\ SO_2}{lb\ mole}$$

Where:

SO_2 = flare sulfur dioxide emissions in pounds per hour;

H_2Smc = monitored combined inlet flare stream hydrogen sulfide (H_2S) concentration in units of cubic feet of H_2S per 1,000,000 cubic feet of flow;

Scc = sampled composite inlet flare stream total sulfur compound concentration in units of cubic feet of total sulfur per 1,000,000 cubic feet of sample;

H_2Ssc = sampled composite H_2S concentration in units of cubic feet of H_2S per 1,000,000 cubic feet of sample;

FFa = inlet gas stream flare flow in units of actual cubic feet per hour;

Psc = regulatory standard condition pressure of 14.7 pounds per square inch (psia);

Pa = FFa measurement pressure in units of psia;

Tsc = regulatory standard condition temperature of 528 degrees Rankin; and

Ta = FFa measurement temperature in degrees Rankin.