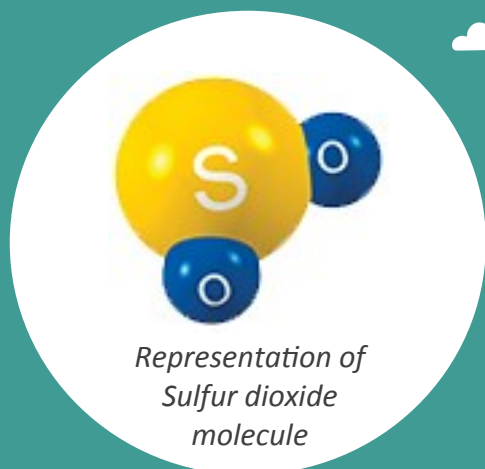


AIR QUALITY FACT SHEET GLADSTONE

Sulfur Dioxide



Sulfur dioxide (SO₂) is a colourless gas with a sharp, irritating odour.

All 7 of the Gladstone air quality monitoring sites where sulfur dioxide levels are measured, had annual averages well below the recommended air quality standards, from December 2017 to November 2018.



Sulfur dioxide combines with water and air, to make sulfuric acid. Sulfuric acid is the major component of acid rain.



The recommended air quality standards for sulfur dioxide are:

- <0.20 parts per million (ppm) for a 1-hour exposure period
- <0.08ppm for a 24-hour exposure period
- <0.02ppm for an annual exposure period.

In Queensland, our weather conditions and low sulfur content of fuels decrease the potential for acid rain.

Ambient concentrations of sulfur dioxide. Annual average concentrations (ppm), December 2017 to November 2018.

Air Quality Monitoring Station	Annual Average Concentration (ppm)
Targinie	0.002
Fisherman's Landing	<0.001
Boat Creek	0.002
Clinton	0.001
Memorial Park	0.005
South Gladstone	0.002
Boyne Island	0.001

Sulfur dioxide affects the respiratory system, specifically lung function, and can cause irritation to the eyes.



Fisherman's Landing had the lowest annual average of sulfur dioxide from December 2017 to November 2018.

Sulfur dioxide is produced when fossil fuels are burnt and by the smelting of mineral ores that contain sulfur.



In Queensland, high concentrations of sulfur dioxide are only measured near large industrial sources.

Acid rain causes deforestation, acidifies waterways, can harm aquatic life, corrodes building materials and paints but acid rain from SO₂ has not been documented in Australia according to NPI



Memorial Park had the highest annual average, but below the recommended limit of sulfur dioxide from December 2017 to November 2018.

