What is safety flaring?

Safety flaring is a standard process for safe operations of the LNG Plant, ensuring hydrocarbons that cannot be used in the liquefaction process are safely combusted and not directly emitted to the atmosphere.

Santos GLNG has approval from the Queensland Government’s Department of Environment and Science to conduct safety flaring to ensure that people, property and the environment are protected.

What is happening when I can see smoke from the flare?

During normal operations a small flame, commonly called a pilot flame, will burn continuously from the flare stack.

To prepare an LNG plant for safe maintenance works, or a ‘shutdown’, the plant needs to be cleared of all gases to ensure the safety of workers and the equipment. All the gases held within the plant, that cannot be recovered or reused, are then sent to the safety flare.

Visible smoke may be produced when traces of refrigerant, such as propane and ethylene, are contained in the gases sent to the flare.

While it is rare for the flare to produce visible smoke, Santos GLNG is continuously improving its operating procedures to safely reduce safety flaring and visible smoke to the maximum extent possible.

Fast facts

Safety flaring is a vital safety control for LNG production operations

Visible smoke from safety flaring may occur during maintenance, shutdowns or process upsets

Visible smoke has no adverse impacts on health or air quality

Santos GLNG is committed to minimising flaring to the maximum extent possible and where it is safe to do so
Does safety flaring impact on air quality?

Environmental Authority amendment

GLNG has applied to the Department of Environment and Science, at its request, to amend the Environmental Authority (EA) that authorises operations at the GLNG Facility on Curtis Island.

The EA amendment application seeks to include clear limits on the frequency and duration of visible smoke allowed from the GLNG facility during maintenance and process upsets.

The limits being applied for are consistent with those for similar LNG facilities operating on Curtis Island.

The EA amendment application is supported by air quality modelling which shows that visible smoke released during safety flaring events does not adversely impact air quality in the region.

More information on the EA amendment application is available on the Santos website.

Clarity on safe flaring limits

To bring GLNG in line with other LNG facilities operating in the region, GLNG’s EA amendment application is for visible smoke flaring to occur:

- No more than 7 hours per annum; and
- No more than 14 times per annum; and
- No more than 30 minutes per flaring event but up to a maximum 90 minutes when a flaring event must be done during daylight to ensure the safety of workers and the safe operation of the GLNG facility.

GLNG’s EA amendment application is not intended to increase the levels of flaring activity at the GLNG Facility. Santos GLNG is continuously improving its operating procedures to safely reduce flaring and visible smoke flaring to the maximum extent possible.

For further information about any information in this fact sheet or any other queries relating to Santos GLNG please call our Community Information Line: 1800 761 113 or email at community@santos.com.

Does safety flaring impact on air quality?

Flaring reduces greenhouse gas emissions when compared to simply venting gas from the process.

Air quality modelling predicts no adverse impacts on health or air quality from safety flaring at Santos GLNG.

The Queensland Government’s Department of Environment and Science monitors Gladstone’s air quality 24/7 through a network of nine air quality monitoring stations in Gladstone to ensure air quality remains within the strict limits contained in the Environmental Protection (Air) Policy 2019.

Live air data can be viewed for free at https://apps.des.qld.gov.au/air-quality/.