



FLARING IS ESSENTIAL FOR SAFETY



Flaring is an essential part of the LNG production process, ensuring the conversion of natural gas to liquid is carried out safely.



WHAT IS FLARING?

Flaring safely eliminates excess gases that cannot be recovered and reused in order to minimise the plant's greenhouse emissions.

During flaring, methane is broken down into water vapour and carbon dioxide, which has just $\frac{1}{25}$ th the greenhouse impact as releasing unburnt gas.

The flare operates whenever the plant does, to ensure safety 24/7.

The vast majority of the time (99%+), the flare eliminates small quantities of excess methane to ensure safe and reliable plant operation, producing a clean-burning flame that is usually barely visible by day.

The flame varies in height and brightness, depending on the amount of gas being eliminated.

FLARING IS ESSENTIAL TO THE SAFE OPERATION OF AN LNG PLANT.



WHAT IS A SMOKY FLARE?

On rare occasions—less than one percent of the time—the flare stack will produce visible smoke known as a ‘smoky flare’.

Smoky flares occur when excess gases used as refrigerants in the liquefaction process—propane and ethylene—are sent to flare when they cannot be recovered and reused. Shell’s QGC business is committed to minimising smoky flaring.

Smoky flares occur for one of two reasons.



For regular maintenance

As with any complex machinery, like the family car, regular maintenance is essential for the safe and efficient operation of an LNG plant.

Before maintenance work can occur, the plant needs to be free of all gases—including refrigerants—so workers can do the job safely.



For safety stoppages

The Curtis Island plant has safety at the core of its operations.

The advanced, computerised safety system automatically shuts the plant down if operating conditions are less than optimal.

This is to ensure the safety of workers and prevent damage to critical equipment. This does not necessarily mean there is a fault—the system has been designed to ‘err on the side of caution’.

Following a safety stoppage, all gases that can’t be recovered and reused must be eliminated to allow the system to be safely restarted.



Flaring is approved by the Department of Environment and Science.

Shell’s QGC business has approval from the Queensland Government’s Department of Environment and Science (DES) to flare at its Curtis Island plant to ensure ongoing, safe operations.

Flaring is carefully monitored by the DES to ensure it is carried out within the conditions of our environmental authority.

CONTACT DETAILS

Please contact Shell’s QGC business for more information.

1800 030 443 (toll-free)

email: community@shell.com.au

QGC Pty Ltd.

275 George St

Brisbane QLD 4000,

Australia