National Operational Guidance

NFCC National Fire Chiefs Council

Developed and maintained by the NFCC

Contents

Liquefied natural gas (LNG)

Information

Liquefied natural gas (LNG) is natural gas that has been cryogenically cooled to its liquid state. It is the same gas or methane that is piped throughout the UK for domestic use but, by cryogenically cooling the gas to -162°C, its volume is reduced, making it easier to transport and store. It is odourless, colourless, non-toxic and non-corrosive.

Refuelling

See BOC website for information on the use of LNG for heavy goods vehicles (HGV) and the refuelling process.

Hazards (for further information refer to National Operational Guidance: Utilities and fuel and National Operational Guidance: Hazardous materials)

- LNG is a cryogenic liquid; a leak will present a significant hazard to personnel and equipment
- If LNG spills into water, or if water is applied to an LPG spill, the evaporation of gas increases, which may result in a vapour cloud explosion
- LNG is odourless and colourless
- LNG creates a highly flammable/explosive atmosphere
- Initially gas may be heavier than air; as heat is absorbed, it will start to rise
- LNG is an asphyxiant
- Potential BLEVE (boiling liquid expanding vapour explosion) risk
- Refer to hazards listed on liquid petroleum gas (LPG) supplementary information sheet

References and further reading

www.boconline.co.uk/en/clean-technology/liquefied-natural-gas/lng-transport-fuel/index.html

http://news.bbc.co.uk/1/hi/wales/7881388.stm

http://grainlng.com/

www.netl.doe.gov/publications/proceedings/02/ngt/Quillen.pdf