

SAFETY ALERT

Exposure to high concentrations of LPG

This alert reminds employers and principal contractors of the dangers of exposure to liquefied petroleum gas (LPG).

Background

An apprentice plumber and gas fitter was working alone on the connection of a new gas installation when he cut a live gas line, releasing LPG that filled the trench in which was working.

He became unconscious and later died as a result of asphyxiation.

The work involved tapping into an existing LPG reticulation system, inserting a T junction and running a gas line into a home. A hole had been dug to access the existing underground line and while reaching head first into the hole to sever the line, the plumber was exposed to an LPG-rich atmosphere.

The displacement of oxygen by the LPG led to unconsciousness, asphyxiation and eventual death by arrhythmia (disruption to the heart rhythm).



Contributing factors

Among other factors, LPG is highly flammable, invisible and heavier than air. If it leaks or escapes it will flow along floors, downhill into gullies and tend to settle in low spots, such as trenches or basements.

Aside from the risks of fire and explosion, the risk of death by asphyxiation is also substantial.

The following factors should be considered when working with LPG.

1. NSW Occupational Health and Safety and home builders legislation.
2. Conduct a site specific risk assessment.
3. Ensure that everyone in the workplace follows a safe system of work.
4. Ensure that everyone in the workplace is adequately and appropriately supervised.
5. Ensure that everyone in the workplace can access and read material safety information sheets.
6. Minimise exposure to LPG by having adequate ventilation.
7. Control all sources of ignition, including power tools and static.

Further information

- Call the WorkCover Assistance Service on **13 10 50** or visit workcover.nsw.gov.au
- Call Fair Trading on **13 32 20** or visit fairtrading.nsw.gov.au

Disclaimer

This publication may contain occupational health and safety and workers compensation information. It may include some of your obligations under the various legislations that WorkCover NSW administers. To ensure you comply with your legal obligations you must refer to the appropriate legislation.

Information on the latest laws can be checked by visiting the NSW legislation website (www.legislation.nsw.gov.au).

This publication does not represent a comprehensive statement of the law as it applies to particular problems or to individuals or as a substitute for legal advice. You should seek independent legal advice if you need assistance on the application of the law to your situation.

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WorkCover NSW, 92-100 Donnison Street, Gosford, NSW 2250
Locked Bag 2906, Lisarow, NSW 2252 | WorkCover Assistance Service **13 10 50**
Website workcover.nsw.gov.au

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