

# 10/98 Pressurisation of fuel storage tanks

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## Incident

A diesel fuel storage tank exploded at a Wembley foundry and engineering works after it was pressurised with compressed air.

The fuel was used to fire the furnaces of the foundry. On 16 February 1998 it was found that the fuel line from the elevated fuel tank to the furnaces was blocked.

Compressed air was injected from an air hose into the fuel line in the reverse direction of normal flow in an attempt to clear the blockage. This was not successful.

The air hose was then connected to a fitting at the top of the tank. Compressed air was injected directly into the storage tank.

After a period of time it appeared that this attempt was also not successful. Leaving the air hose connected, the person left the area to turn off the air supply valve located inside the workshop. It was during this time that the fuel tank exploded.

Fortunately no one was injured as a result of this incident.

## Factors

1. A storage tank that had not been designed to withstand pressure was pressurised with compressed air.
2. A gooseneck open to the atmosphere should have been fitted to the tank to prevent pressurisation.
3. The fuel lines had not been regularly cleaned or flushed to limit the possibility of blockages.

## Recommendations

1. Under no circumstances should storage tanks that are not designed to withstand pressure be pressurised with compressed air or any other pressurising medium.
2. Fuel lines should be cleaned or flushed internally to limit the possibility of restrictions or blockages.
3. In line filters should be installed to prevent any solids entering the fuel lines.

## Further Information

Further information can be obtained from the WorkSafe internet site [www.worksafe.wa.gov.au](http://www.worksafe.wa.gov.au), or by contacting customer service on 1300 307 877 or email: [safety@docep.wa.gov.au](mailto:safety@docep.wa.gov.au).

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