



Safety alert 9/2012

Cutting or heating metal tanks

The purpose of this Safety Alert is to highlight the dangers of using angle grinders and/or welders to heat or cut metal tanks.

Background

Recently a worker died when a 4500 litre fuel tank he was cutting with an angle grinder exploded. The tank had been stored in the ground for a number of years and had recently been removed for disposal. The employee was cutting the fuel tank to ready it for transport. Sparks or heat from the angle grinder may have ignited residual vapours in the tank, which then exploded.

Contributing factors

- The fuel tank may have previously contained a highly flammable liquid and possible chemical residue.
- Angle grinders produce ignition sources such as heat and sparks.
- There was no labelling on the tank to indicate the type of fuel that had been stored, nor information that it had been purged, cleaned and de-gassed appropriately.



Image of the damaged drum and wall

Action required

1. Do not use angle grinders or any other heat-producing equipment such as welders to cut metal tanks or drums that have or may have contained flammable or combustible liquids or flammable gases.
2. Where there is any doubt about the previous contents of a tank or drum, have the contents tested for chemical makeup.
3. Make sure tanks and drums are recycled by specialist cleaning companies.
4. Have Material Safety Data Sheets (MSDS) available for all hazardous substances at the workplace and provide this information to all employees who are likely to be exposed to these substances.
5. Provide adequate training and instruction to ensure that employees understand the MSDS information, especially employees who have limited understanding of English.
6. Treat all tanks and drums as hazardous or having contained an explosive substance or vapour.

Further information

Further information can be obtained from WorkSafe's internet site www.worksafe.wa.gov.au or by contacting customer service on 1300 307 877 or email safety@commerce.wa.gov.au

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