

HAZARD ALERT

Information

85

Portable Generator Safety

PURPOSE

To advise the construction industry and wider community about the hazards associated with using portable generators.

BACKGROUND

An apprentice carpenter sustained serious burns while refuelling the fuel tank on a portable generator.

While pouring petrol from a 20-litre jerry can, fuel spilt on to hot components of the generator and ignited. The generator was located within an enclosed 'tradesman's trailer' and the trailer, jerry can and surrounding area were quickly engulfed in flames.

STATUTORY REQUIREMENTS

The Occupational Health, Safety and Welfare Act 1986 requires that employers provide safe systems of work for all employees.

Self-employed persons are required to protect their own health and safety and avoid adversely affecting the health and safety of any other persons.

The Dangerous Substances Act 1979 also requires a person who handles a dangerous substance to take such precautions and exercise reasonable care in order to avoid endangering the health or safety of any person or the safety of property.

RISK CONTROL MEASURES

Decanting fuel into portable equipment is a hazardous process.

The combination of fuel, oxygen and hot components could result in ignition if adequate control measures are not put into place.

As with all plant in the workplace, the employer must identify all possible hazards associated with using a portable generator and make an assessment of the risks. Appropriate control measures must then be implemented to eliminate or minimise the risk of injury.

Always refer to the operator's manual for guidance. It may be necessary to take additional precautions to account for the actual work environment.

Suitable control measures include:

- Allow the motor to cool before refuelling.
- Check for potential ignition sources.
- Use approved fuel containers & funnels (otherwise fuel can generate it's own static electricity while being decanted).
- Use a smaller container that is easy to handle.
- Ensure suitable fire extinguishers are immediately accessible.
- Consider alternative power generators and diesel-fuelled options.
- Inform employees of the hazards and control measures required to make fuel decanting safe.
- Provide adequate flow-through ventilation (unless it's too windy to pour fuel safely)
- Commit to a safe refuelling procedure and make sure it is used.

Further guidance on storage and handling of flammable liquids is available from SafeWork SA.

It is also important to be aware of additional hazards associated with use of portable generators such as:

- noise from the exhaust
- manual handling, such as lifting & starting
- guarding of any moving parts
- ventilation of fumes, such as carbon monoxide & carbon dioxide
- electric shock.

Guidance on these hazards is also available from SafeWork SA.

FURTHER INFORMATION

SafeWork SA
GPO Box 465
ADELAIDE SA 5001

Country Offices
Berri, Mount Gambier, Port Lincoln, Port Pirie
and Whyalla

Help and Early Intervention Centre
Library and Bookshop
100 Waymouth Street, Adelaide

Telephone 1300 365 255

Website www.safework.sa.gov.au

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