



Safety in Scouting in Berkshire



BERKSHIRE SAFETY GUIDANCE SHEET

OUTDOOR GAS APPLIANCES

This fact sheet reviews the hazards associated with portable gas appliances, of the type widely used in Scouting, and the precautions that can be taken to ensure the safety of users and others.

These appliances are powered by portable gas sources, usually in re-usable gas bottles or by single-use cartridges, and are used widely in a variety of applications – cooking, lighting, space heating and powering refrigerators and larders. Used properly, they can provide many worthwhile benefits to outdoor activities. However, potentially serious accidents can occur if the incorrect selection of the appropriate appliance is made, if the appliance is inadequately or inappropriately maintained or clearly, or if it is used incorrectly.

The hazards associated with the use of these include :

- Fire and explosion by the ignition of leaking gas, and of ignited oils and fats
- Burns through the inadvertent contact with hot surfaces, splashing oils and fats
- Scalds from hot liquids being heated on cookers

Selection of appliances and gas sources

Consider the following when selecting appliances for a particular activity :

- Is the appliance going to be used in just one spot, or will it be moved around during the activity.
- Will its use be for a short time (an hour or so) or for prolonged use (for example, a week long camp) ?
- Will you be using modern equipment, designed to the latest standards, with spare parts readily available ?

Many of the older stoves and lanterns have been superseded with more modern designs, incorporating modern safety standards. In particular, the design which uses a valve-less gas canister (in which a spike, fitted to the appliance, pierces the canister to release gas) has largely been replaced by manufacturers, in favour of a screwed connection to a ball-valved canister or bottle. The former type relies on a washer type seal being in a clean and sound condition, and the canister being held tightly against this at all times by a properly maintained mechanism.

Berkshire County Executive Committee strongly recommend against the use of the pierce type of appliance.

- Might there be an alternative fuel source, for example solid fuel tablets or Greenheat Fuel (a non-explosive, non-toxic gel fuel) ?
- Think about the users when selecting equipment : will they have the necessary skill and training to operate the appliance, including the fitting and removal of the gas source; will they be adequately supervised, all of the time, by appropriately skilled and trained adults ?

Use of appliances

Ensure the following points are considered :

- The appliance is in a proper working order with any hoses, burners, piezo ignition devices, jets, regulators and seals etc checked by a competent person before leaving on the activity, and immediately before use.
- The activity and use of these appliances is adequately assessed for risks, such as fire, burns, scalds, movement of people, supervision etc., and the provision of appropriate and adequate fire fighting and first aid equipment.
- It is particularly important that gas sources are only connected and disconnected well away from sources of ignition, including other appliances already in use. Consider always connecting and disconnecting such equipment in an outdoor environment.
- There is adequate knowledge of the actions to take, should a leaking gas source or appliance be suspected.
- Appropriate means are taken to ensure that the appliances cannot be knocked over by the activities taking place around them, and that they cannot tip over because too large a dixie (for example) is balancing on the stove.
- Those supervising and/or instructing others (particularly our young members) must have appropriate training.
- Do not permit unsupervised use of these appliances where age and inexperience are factors in the activity risk assessment.

Maintenance

- All equipment must be thoroughly and regularly checked by a suitably competent person.
- No hesitation should be given to withdrawing from service, equipment, appliances, gas bottles etc that are suspect. If they cannot be repaired immediately, they should be tagged with 'Do Not Use', and put into secured storage until such times that they can be properly repaired, or disposed of.
- Quartermasters should routinely prepare a list of equipment for replacement, preparing a suitable case and budget to the appropriate Executive Committee.
- Quartermasters should implement a planned replacement programme for high pressure hoses and regulators in accordance with the manufacturer's recommendations (see Factsheet on hoses).

- Repairs should only be effected using the original manufacturer's replacement parts, and using appropriate tools.
- Consider asking for advice directly from the manufacturer.

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