

## Fire Precautions Information Sheet Guidance on Organised Bonfires and Firework Displays

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It should be noted that a number of recommendations in this guidance are strictly appropriate only to large public displays. However, organisers of smaller displays will wish to consider in each case to what extent the recommendations are appropriate to the type of display they are planning. Public safety is dependent upon good organisation.

### 1. Permission

Permission should be obtained prior to any organisation from the Health and Safety Office, for a bonfire or firework display to be held on campus. The Security Manager must also be notified.

### 2. Responsibility for Display

A Committee should be responsible for the operation of the display, with one member in direct charge of safety matters and not engaged in any duties or activities which would prevent them exercising general supervision. A separate Committee Member should be responsible for bonfire safety.

### 3. Site, Size and Location

The firing site should be as large as possible; for average size displays about 55 metres by 36 metres with an adequate area, ideally 46 metres deep, for possible fallout to the rear of the firing site. There should be a minimum distance between spectators and the firing site of 23 metres for smaller displays and 30 metres for larger displays. The firing site and the fallout area should be away from trees, combustible materials, buildings, parked cars etc. Undergrowth on the site should be cleared and grass cut short in the vicinity of the display area.

### 4. Liaison with Local Authorities and Emergency Services, and Fire Fighting Arrangements

- a) The Fire Brigade, the Police and the local authority should be contacted when planning a display, and where appropriate close liaison should be maintained.
- b) An adequate means of access to the whole site as well as to the display area should be agreed with the emergency services and be maintained before and throughout the display.
- c) An adequate number of fire extinguishers and supplies of sand, buckets of water, etc., should be provided, and certain stewards should be trained in the operation of fire fighting equipment.
- d) Suitable first-aid facilities should be provided.

### 5. Operators

The number of operators should be kept to a minimum. They should study the manufacturer's general instructions well before the display, and should preferably have some previous experience in the use of display fireworks. They should also be provided with electric torches.

### 6. Storing and Handling of Fireworks

- a) Fireworks should be unpacked carefully, remembering their fragility, and in a safe dry place, away from open fires and flammable materials.
- b) Fireworks should be kept separate from packaging material.
- c) All fireworks other than those already set up for the display should be kept in a closed container, which should not be opened whilst any firework is burning.

### 7. Firing of Fireworks

- a) Well beforehand, the instructions on each firework should be studied carefully.

- b) The possibility and importance of a sudden change of wind should be remembered, as it can result in sparks and spent rocket sticks falling among spectators and smoke obscuring the display.
- c) All fireworks with aerial effects should be angled away from spectators to ensure that remnants fall where they can cause neither injury nor damage (i.e. in the fallout area). Firing over the heads of spectators should be avoided.
- d) A specially designed device for lighting larger fireworks (called a portfire) is usually provided with each display, and only this should be used for the purpose. Fireworks should be lit at arms length. Portfires should not be carried in pockets, and should be kept in a closed container at a convenient place on the firing site.
- e) Should a firework fail to go off, under no circumstances should anyone return to it (see under 9 for disposal of live fireworks).

## 8. Spectator Control

- a) All staff should know their duties if evacuation of the site becomes necessary. Arrangements and a drill for calling the emergency services should be pre-planned.
- b) Spectators should be kept away from the firing site behind a suitable barrier. Firing should cease if spectators breach the barrier.
- c) The back and sides of the firing site should be kept completely clear for the duration of the firing.
- d) The maximum number of stewards should be provided for crowd control. The ratio of stewards to crowd numbers is determined by the event risk assessment. It is recommended however that this should be two stewards for up to 500 persons and one for each additional 250 persons. Every steward should be readily identifiable e.g. by wearing a fluorescent jacket. The stewards should not be engaged on any duties which would hinder the prompt discharge of their duties in the event of an emergency, including the evacuation of the site if necessary, and should be so placed as to be able to easily enter into the crowd. Overcrowding should not be permitted.
- e) The number of persons within the firing site of the display should be limited to the minimum necessary for the operation of the display. (In no circumstances are more than three persons likely to be necessary).
- f) An adequate public address system should be provided for larger displays and some means of addressing the crowd for smaller displays.
- g) No spectators should be admitted to the display with their own fireworks. Notice of this should be published in advance and exhibited at all entrances.
- h) In enclosed areas a sufficient number of entrances and exits should be provided for spectators to be admitted in an orderly manner and to permit ready dispersal at the end of the display. The possibility of a sudden influx of large numbers of people should be borne in mind.
- i) An adequate number of emergency exits should be provided.
- j) Entries to and exits from the display should be adequately illuminated and kept free of obstruction.

## 9. Bonfires

- a) The bonfire should be sited on open ground well clear of buildings, car parks, standing trees, etc. A 15 metres clearance all round should be regarded as minimal. To prevent unauthorised access to this area and to maintain a safe area a barrier should be erected (i.e. rope).
- b) In order to light up the bonfire a torch for lighting up from a safe distance can be easily made from a piece of rag tied to a length of metal conduit and soaked in paraffin and then lit with a match.
- c) Flammable liquids should not be used to assist the ignition of the bonfire. The materials to be burnt in the fire should be carefully selected to exclude rubber tyres, hazardous rubbish, e.g. aerosols, tins of paint, bottles etc.
- d) The bonfire embers should be properly extinguished before the site is vacated.

## 10. After the Display

- a) The firing site should be thoroughly searched for live fireworks which have failed to ignite; any found should be handled with care and put in water. They should not be burnt.

- b) Metal litter bins, clearly marked, should be provided throughout the spectator's area, with arrangements for emptying them.

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