Appendix 1 Fire Risk Assessments - Fire Extinguisher Provision Strategy

General Areas:

The following areas are considered, where "properly managed", to represent a low fire risk:

Offices, Sport facilities Seminar rooms ¹, Lecture theatres ¹

In this context, "properly managed" will include:

Observance and enforcement of the University's Smoking Policy; Testing of portable electrical appliances in accordance with university risk assessments:

Good standards of housekeeping observed (i.e. doors not wedged open, notice boards properly managed, escape routes not obstructed, bins properly managed and regularly emptied etc.);

As a result of these findings, it is proposed that no extinguishers be provided within these areas unless a specific assessment is undertaken which provides an argument to the contrary.

Means of Escape:

Means of escape corridors and staircases are also deemed as low fire risk (subject to the same caveats of proper management discussed above).

However, in the event of an evacuation, security staff will be expected to use these routes to investigate the cause of an evacuation. Likewise, the Rescue Team may be called upon to enter the building via these routes to help people within refuges to evacuate. Both of these scenarios could necessitate entry into a building where a fire has broken out.

It is therefore deemed necessary to provide fire extinguishers at final exits on all storeys of each building for the specific use of these two groups.

The types of fires likely to be encountered in general areas will be Class A (wood, paper and textiles) and Electrical Fires. Class A fires can be tackled using water, foam or Attenuated Fire Fighting Foam (AFFF) extinguishers. Electrical fires can be tackled using Carbon Dioxide (CO₂) fire extinguishers. The use of water or standard foam extinguishers on electric fires could result in an electric shock or electrocution of the user; the use of AFFF on electrical fires still poses a risk but reduces the potential severity of these outcomes to the user. Therefore, AFFF (6 litre) and CO₂ (2 kg) will be the type of extinguishers provided within common areas.

Laboratories and Workshops:

Risks in these areas will be dependent on the type of activities undertaken. Occupying Schools and Units will need to undertake specific risk assessments to determine the overall fire risks within these rooms. Assessments should identify whether fire extinguishers are recommended. Where extinguishers are deemed an appropriate control measure the occupier is to liaise with the HSEO before extinguishers are fitted.

¹ Provided the use of these rooms does not include processes or activities that introduce a risk of fire e.g.. Chemistry demonstrations. In these cases a separate fire risk assessment will be required.

Plant Rooms:

Plant rooms are essentially "sterile" areas in terms of combustible fuel loading; they also have fire-resisting construction which would prevent the spread of fire and smoke into buildings in the event of a fire. However, many plant rooms do contain electrical switch gear and apparatus. Plant rooms are fitted with heat detectors so any automatic fire detection will only actuate once a fairly considerable sized fire has broken out. Similarly, plant rooms are usually only accessed infrequently (e.g. to undertake works on the electrical systems) under strict control (permit to enter.). Because of the increased risk of electrical fires it is considered that all plant rooms should have CO_2 extinguishers located at any entrances to the plant room. Other extinguishers should only be provided where location specific risk assessments identify these as being necessary. These assessments should be undertaken by Estates and Facilities Management Division and shared with HSEO before any further extinguishers are added.

Kitchens:

Small kitchens, including coffee shops etc. (with any of the following: microwaves, toasters, Panini (or similar) machines.) present a low to medium risk of fire. Sources of ignition are likely to be electrical in nature. Fuels could be food, paper or material based. Because of the close proximity of users to equipment it is foreseeable that clothing fires could arise; it is recommended that these types of kitchens be fitted with fire blankets. Fire blankets would also be appropriate extinguishing media for the types of fires likely to be encountered in these areas. Extinguishers are not deemed necessary.

Larger kitchens present a greater risk of fire (e.g. due to use of deep fat fryers, gas etc.). The University's insurers require all these outlets to have special "Fry-fighter" extinguishers. In addition, these areas also have significant amounts of electrical equipment as well as presenting a greater risk of clothing fires. On this basis, all larger kitchens are to be provided with Fire Blankets (to be sited adjacent to each cooking station), $C0_2$ (2kg) extinguishers at each exit and Fry Fighter extinguishers adjacent to any areas where deep-fat frying takes place.

Licensed and Non-Licensed Events:

Wherever licensed activities (including sale and supply of alcohol, theatre performances, film shows, live and recorded music, dancing) a specific fire risk assessment has to be undertaken and submitted as part of the licensing process. This is required regardless of where these activities are undertaken (e.g. open air, marquees, lecture theatres, seminar rooms etc.). In addition to licensed events, the University also undertake a number of non-licensed events throughout the year. The FSO requires that these also be fire risk assessed. Both licensed and non-licensed event assessments should cover all fire safety aspects including the provision of extinguishers and the identity of anybody that would be expected to use those extinguishers. Since these requirements are likely to vary depending on the specifics of the event, advice on this aspect should be sought from the HSEO when the event is being organised.

On-Campus Residences:

Over the last few years, fire extinguishers within residences have been subject to considerable abuse / mis-use; numerous extinguishers have been damaged, set off or removed by students (and their visitors) as pranks. On one occasion, this resulted in an extinguisher not being readily available when a real fire broke out. As a result of this incident, the HSEO met with the fire brigade to discuss extinguisher provision in residential accommodation. The fire brigade have expressed the view that provided extinguishers should be serviceable but, provided this is validated by risk assessment, that these can be removed from common areas.

An analysis of University fire incidents shows that in large residences (The Park houses and East Slope) residential extinguishers provided in communal areas are only used as intended by Security officers attending fire alarms. Most often, fires originate in kitchens; these fires tend to be put out using the extinguishers locally provided in the kitchen. The standard provision within residential kitchens is a fire blanket and a dry powder extinguisher. Dry powder extinguishers are messy but have the added benefit of being able to be used on both Class A and electrical fires with complete safety; this factor is deemed important in these areas since users are likely to be inexperienced, may be more willing to "have a go" even though advice is to the contrary and may select an inappropriate extinguisher if faced by an emergency. This provision remains unchanged. Deep fat fryers are banned within residences therefore the supply of fry-fighters is not deemed necessary.

In common areas, it is proposed that in those residences where extinguisher mis-use is commonplace, that extinguishers be removed from public view and re-sited in discrete but readily-accessible areas if security require them. For East Slope residences a scheme is currently being trialled whereby extinguishers are located in boxes fitted with alarms. The results of this trial will be reviewed over coming months. Extinguishers provided in these areas will be AFFF and CO₂ as provided in other means of escape.

In other residences (Lewes Court, Brighthelm, Park Village) mis-use of fire extinguishers is less common; these are to remain in place. Provision is to be in accordance with other means of escape.

Night-Porter Serviced Off-Campus Residences (including Stanmer Court)

This encompasses the Kings Road and Stanmer Court residences. Because these buildings are remote from campus (and therefore cannot be serviced by Security as part of the standard emergency arrangements) any fire intervention is likely to be co-ordinated by the resident porters. Both residences consist of a single means of escape staircase. Experience of extinguisher mis-use is limited therefore provision is to be in accordance with other similal means of escape.

Kitchens are to be protected in the same way as other residential properties i.e. fire balnkets and dry powder extinguishers to be provided.

Hot Works:

Hot works is a term used to describe any activities or processes undertaken on a temporary basis within any type of room. Examples would include welding, brazing or cutting when undertaking construction or maintenance tasks. Hot works undertaken on this basis have to be carried out according to the University's permit to work scheme. This requires each task to be properly risk assessed and precautions taken to prevent the outbreak and spread of fire. The type and size of extinguisher will need to be identified within the risk assessment. This type of work is likely to be confined to Estates and Facilities Management fitters or external contractors.

Hose Reels:

These are provided in many buildings. Discussions with the fire brigade have indicated that they are unlikely to rely on this provision to fight fires within our buildings. Even though these items are unlikely to be used, the University have a legal requirement to ensure that they be maintained in good working order all the time that they are available for use. This represents a significant financial burden on the University. Consequently, it is proposed that this provision be reviewed with the University's insurers with a view to removing these items.