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To Safety Co-ordinators (for onward transmission to Deans of Faculty, Heads of Schools, Safety Advisors, Safety Representatives)

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## Gas cylinders etc in fires.

At its meeting in May 2006, the University Risk and Emergency Planning Group considered a briefing report about a major fire at the University of Southampton, which resulted in an approx £50 million loss (copy attached). The report was prepared by their insurers (UMAL).

Amongst other things, it was reported that the fire brigade did not attempt to enter the building to fight the fire, because of the presence of compressed gas cylinders. There have been spectacular pictures in the press of gas cylinders exploding through the roof, as the fire took hold.

The REPG discussion reports that this University must be able to produce accurate indications of the location of gas cylinders and other potentially explosive substances / materials, and to ensure that this information is immediately accessible in the event of a fire. In the past, the Greater Manchester Fire Authority have required similar information in the form of a block plan, with rooms containing compressed gas or flammable solvents shaded in, and door labels on each lab, workshop, etc door to indicate their presence to fire crews about to enter. Obviously, the main objective is to protect the health & safety of fire fighters and others, not to safeguard property (physical or intellectual).

The purposes of this circular are:

- to raise general awareness and inform you about the safety issues;
- to advise you that, in the near future, safety co-ordinators will be looking at how schools manage the fire risks introduced by their staff and students, as part of the overall programme for fire risk assessments being co-ordinated by Estates;
- to ask you to collate any records your school already has about gas cylinder locations and uses, and how you make that information available in the event of a fire.

Please note that the particular risks of acetylene cylinders in fires are addressed in an earlier circular (3/2006) and in the University Code of Practice on this topic at

[http://www.campus.manchester.ac.uk/healthandsafety/CoPs&Guidance/acetylene\\_cylinders-fire\\_risk.doc](http://www.campus.manchester.ac.uk/healthandsafety/CoPs&Guidance/acetylene_cylinders-fire_risk.doc)

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# Southampton University Fire, Briefing Note

## Background

The fire started at 6.30 am on 30 October 2005 (a Sunday morning) after a gas alarm was triggered by smoke from a fire in a “clean room” building. Although the Fire Brigade were in attendance within minutes, the steel framed clean room was gutted by 9.00am. The fire spread to a link building and then on to a four storey administration block, which was partially destroyed. The fire was under control by midday and site access allowed late on Sunday afternoon. However the police did not release the scene until two days later. Over 100 firefighters and 45 appliances were at the scene. The clean room facility housed expensive fibre optic equipment where research work was undertaken. It is believed that the fire was started by an electrical fault but due to the intensity of the fire, it was impossible to ascertain exactly where the fire started.

A potentially small loss became a huge loss because the Fire Brigade retreated when they found (c. 135) gas cylinders within the building. They continued to fight the fire from a distance. If the Fire Brigade had fought the fire from inside it is estimated that the loss would have been within the region of one or two million pounds. The estimated loss is now in the region of £50 million.

Following a 2003 directive the Fire Brigade’s priority is saving lives not property. If they discover a significant risk that is a threat to their personal safety, the fire brigade will not fight fires from within a building unless there are people inside. The buildings had combustible panels which caused the fire to become even worse and eventually the gas bottles exploded.

The roads around the buildings were closed to all but essential vehicles. The Council later charged the University for the road closures! The Environment Agency checked local streams etc charging the University £5,000 for contamination monitoring.

The buildings were used by subsidiary companies and many different faculties/schools, so the insurance claim is potentially a complicated one in terms of proving what equipment has been lost. The linked buildings will also probably be demolished and rebuilt. The claim is expected to be in the region of £50 to £60 million.

Interestingly, the research was able to continue by transferring to similar facilities in Germany (paid for by the Business Interruption insurance policy). The University even obtained an additional research contract following the media coverage of the fire, which highlighted Southampton's specialist research facilities.

## Salient Points

- The Fire Brigade will not necessarily fight a fire from within a building if there are gas cylinders inside.
- It is essential to be able to produce an accurate, up to date list of the location of all gas cylinders, and their contents.
- Media coverage immediate, heavy and speculative. Aerial photographs, rumours of radioactive material, weapons research. Reputation affected. UMAL have professional media advice available. They were immediately sent to Southampton.
- Immediate utilisation of website to quell rumours.
- 9000 items of contents lost.

- 400 staff lost their work place, email addresses, servers and phone numbers. Southampton purchased 100 mobile phones so that these staff could continue their work and be contactable. Difficulty in purchasing 100 mobile phones.
- 5000 fire related invoices already processed in the first 6 months. Extra staff employed.
- Huge loss of facilities. Portakabin village utilised to house staff on site. Additional space lost.
- Central control room Disaster Recovery phone number not given to members of the Disaster Recovery Group.
- It will take two years to fully recover from the fire and to rebuild facilities.
- Staff morale seriously affected. Kept involved with regular updates. (A £200 Christmas bonus was issued to all staff affected)!
- Know where to look for alternative accommodation.
- Assess impact of a disaster at (our University) on surrounding businesses, infrastructure and environment. Perhaps increase the limits of liability on our Public Liability insurance policy.

### **UMAL Response**

UMAL responded immediately and sent their loss adjusters and business continuity expert who were on site by midday. They appointed International Damage Management (IDM) to assist with the task of getting the business up and running as soon possible. UMAL provided help with media coverage and paid for two additional staff members to assist with the claim (all provided under the Business Interruption insurance policy). Southampton eventually realised that processing the claim was becoming impossible because of the enormity of the loss. In January 2006 they employed the Forensic Accountants, Grant Thornton, to manage the claim. (Southampton advise that this is done immediately).

The first £5 million of the claim is paid by the mutual. ACE (our insurers) pay the next £20 million (up to £25 million) and the top layer (£75million over £25 million) is paid by numerous excess layer insurers. UMAL immediately issued a contingency payment of £250,000 to Southampton University. A further cheque for £3 million has been sent as an interim payment as a cash flow is essential. (Southampton are currently in credit).