## CFRA update on emerging issues and fire investigation

The fire occurs at 65 Lakanai, Havil Street Camberwell, SE 5. This is a block of purpose built flats, 14 stories high. The flats each has 2 level. The block has one staircase. The main areas of damage were to the 9<sup>th</sup>,10<sup>th</sup>,11<sup>th</sup> 12 and 13<sup>th</sup>, and there was also fire spread to the 6<sup>th</sup> and 8<sup>th</sup> floor. The Brigade were called at 16.18 hrs.

3 people were found dead on the scene. The Brigade carried out multiple rescues but 3 further people died in hospital. 15 further people were taken to hospital suffering from the effects of breathing smoke, and burns.

## Fire fighting tactics

The operational concept for this type of building is known as 'defend in place' The building is built in such a way that any fire should be contained to the flat where the fire began. Other residents are protected because of the structure of the building divides the flats into fire resisting cells. When the Brigade arrived they fight the fire in the flat and should only have to evacuate those directly affected. Other residents are advised to stay put. If then the Brigade decide that they are at risk, they evacuate them.

## Incident

When the Brigade were called they found a fire on the upper floors, probably the 9<sup>th</sup>. They went up to the 7<sup>th</sup> floor where they set up a bridge head to commenced fire fighting operations. This is normal practice. As fire normally travels vertically, fire fighters start their attack from below. Early on there was unexpected fire travel down the building, affecting the floors below the firefighting bridgehead which was compromised by smoke. Crews had to withdraw to lower levels to mount their attack as well as fight the fire growing on lower floors. At present, the picture of exact events is not clear, due to the inherently fast moving situation. The fire was also spreading to the floors above the original fire.

## Fire Spread

At present, it is yet to be established how the fire spread. The downward spread has initially been explained by failures in the plastic windows which melted and dropped onto open windows below. However, the exact mechanism is yet to be establish and will require further investigation.

Fire spread beyond the flat where the fire began is unexplained. Initial investigations have noted that the fire resisting construction may not have been either designed or installed correctly. This allowed fire to travel into escape corridors above the fire. There was also an issue that a gas main was damaged and involved in the fire at this level, adding to the severity of the fire and fire fighting problems. The gas supply could only be isolated by the gas company who had to dig up the road to do so.

The Brigade sent 18 main appliances and 6 fire rescue units which gave the Brigade the ability to maintain a sustained attack on the fire using extended duration breathing apparatus. These were required due to the arduous nature of the fire scene

What is the process for fire investigation

The fire will be investigated by both the London Fire Brigade and Metropolitan Police Service. It is presently a crime scene where the police have primacy. The London Fire Brigade have a world renowned expertise in fire investigation. Their expertise has been used by CLG previously with investigating fatal fires elsewhere in the UK including fire fighter deaths. They enjoy a good working relationship with the police. The police have to establish whether there has been any criminal intent leading to the fire. Primarily this is to establish whether it was an intentional act, i.e. murder, arson etc. The fire authority will also be investigating under the Fire and Rescue Services Act 2004. In practice the Brigade and police will work closely together. As such, this situation is sub-judicy until the cause is established. The Coroners office will be involved. I believe, but a legal view is being sought on this, that if it is murder, the police continue the course of their investigation. If not it becomes subject to the coroner who decides whether or not an inquest is required.

In relation to the fire regulations, the Fire Authority has the legal duty to enforce the Regulatory Reform (Fire Safety) Order 2005. This requires that the reasonable person, probably the landlord, should assess the risk from fire and make appropriate safety measures. This only included the common parts of the building. In practice this investigation will run parallel with the above, but will wait for any police action or inquest to finish.

At present the investigation is at a very early stage. This is a complex fire and the on site investigation is still very much ongoing.

In relation to FRD this is a fire of special interest. Discussions between the London Fire Brigade and CLG Building Regulation team have agreed further investigations. CLG Building Regulations Team have a contract with the Building Research Establishment to carry out fire investigations. The Building Research Establishment will be asked to start an investigation tomorrow. London Fire Brigade will assist them on site and liaise with the police to gain access to the site.

Setting out how the RRO and building regs, etc apply

The Building Regulations 2000 apply to building work as defined in the Regulations. This includes the erection and extension of buildings and certain changes of use. The Regulations do also apply to certain alteration work carried out on existing buildings. In general, controlled work on existing buildings is only required to make the building no worse than it was before. They do not require buildings to be upgraded (other than for certain energy efficiency provisions). The Building Regulations set out broad, functional requirements for the design of a building. Guidance on one way of complying with these requirements is set out in a series of Approved Documents. Compliance with the guidance in an approved document is evidence tending to show compliance with the Regulations. Designers can, and often do, elect to adopt alternative design strategies but the onus of proof of compliance rests with them. Lakanal House had a single central stairway. This is a well established, common approach to the design of buildings of this type which has been shown to be effective over many years. The same basic principles are still in use for a large number (probably the majority) of blocks of flats across the UK. The principle is that each flat is designed to contain a fire so that other residents in the block need not react and would not be put at any significant risk. It is for this reason that smoke alarms are only provided to warn residents of a fire in their own flats and not one occurring elsewhere in the building. This is often described as a "defend in place" strategy. On the rare occasion where it is found necessary to evacuate the residents of a block, this is done under control of the fire service. The stairway and associated corridors are provided with a high standard of fire protection to facilitate such an evacuation

where it is found to be necessary. It appears that this building was refurbished recently to a high standard. Initial investigations found that the flats had smoke alarms and fire mains fitted to help fire fighters worked appropriated. These mains enable fire fighters to use their fire fighting hose at high levels of the building. The scope of these works and whether they had any affect on the fire, will be within the scope of the investigations.

In relation to the fire regulations, the Fire Authority has the legal duty to enforce the Regulatory Reform (Fire Safety) Order 2005. This requires that the reasonable person, probably the landlord in this case, should assess the risk from fire and make appropriate safety measures including escape and warning in case of fire. This only included the common parts of the building. In practice this investigation will run parallel with the above investigations, but will wait for any police action or inquest to finish. This will look at to why the fire spread rapidly and whether the responsible person did not carry out a suitable and sufficient risk assessment.

FAQs/lines on key issues that are raised by this particular fire

Q Why was the firefighting chaotic?

A A fire scene will look confusing, but the crews were modifying their tactics to deal with a changing, complex fire.

Q Why are their no ladders that reach the top of the building? A over a certain height building are provided with escape stairs which are always available and not dependant on the fire service

Q. Why were the people told to stay in their flat?

A. This is normal in large blocks of flats. It means that people are safeguarded while the Brigade fights the fire. In this incident the Brigade did safeguard many people in the initial stages.

(However, the press are reporting that three of those who died on the 11<sup>th</sup> floor were told to stay in their apartments, possibly over the phone, by Brigade personnel. This is very much under investigation but sounds credible from press reports and conversations with Brigade personnel)

Q Are these buildings safe with only one staircase A This design has not shown any particular fire safety problems in the past

Q Is the 'stay put' policy still valid

A initial thoughts are that this is still valid. This is a complex investigation which will examine all aspects of the fire