



Report to the Secretary of State by the Chief Fire
and Rescue Adviser on the emerging issues arising
from the fatal fire at Lakanal House, Camberwell
on 3 July 2009



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30 July 2009

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Executive summary

The fire at 16.19 hrs on 3 July 2009 at Lakanal House, Sceaux Estate, Camberwell, London was by any measure a tragic event. The fire resulted in the loss of six lives, 15 residents and a firefighter were injured and London Fire Brigade were required to assist a further 40 residents to safety. Along with loss of life and injuries, over 90 families had to vacate their homes as a result of the fire.

On 6 July, the Secretary of State for Communities and Local Government, John Denham MP, requested that as the Chief Fire and Rescue Adviser, I undertook an immediate review of circumstances surrounding the fire to provide an independent overview of the investigations relating to the fire and to report back on emerging findings urgently within four weeks.

It was agreed from the outset that my review would maintain close liaison with the respective investigations to identify some early areas for consideration or further review. However, it is also important to recognise that the full investigation, leading to a Coroner's Inquest may take many months to complete and is likely to establish additional information to my early review.

It is also important that my review should not prejudice the formal investigation process. The terms of reference for my review did not extend to the operational performance of London Fire Brigade nor look at wider local authority issues such as contingency planning and therefore my comments are restricted accordingly.

The details that surround the incident, including the development and spread of fire, the firefighting operations and the management of the building remain the subject of further investigation, led by the Metropolitan Police Service. As a result of the ongoing investigations and based on legal opinion it may be prejudicial to the formal investigation process for any significant detail to be published at this time.

However, it is seen as important that the emerging findings and areas for consideration identified during the early stages of my review are published at the earliest opportunity to ensure that the appropriate authorities are able to learn from this incident and thereby reduce the risk of future fires in high rise buildings ending in such tragic circumstances.

Fortunately a fire of this type and with such tragic outcomes is a very rare event in England or the within the United Kingdom. The vast majority of fires in homes are contained within the compartment where the fire first starts in accordance with the design requirements of the building. This fire was unusual in many ways and it is important that lessons learnt from a full investigation into this incident should be used to improve fire safety and firefighting operations in this type of building, to ensure the safety of its occupants.

I wish to record my appreciation for the cooperation of key investigators and stakeholders along with the exceptional work of my team.

A handwritten signature in black ink that reads "Ken Knight". The signature is written in a cursive style and is positioned above a horizontal line.

Sir Ken Knight
Chief Fire and Rescue Adviser

1. Introduction

- 1.1 The fire at 16.19 hrs on 3 July 2009 at Lakanal House, Sceaux Estate, Camberwell, London was by any measure a tragic event. The fire resulted in the loss of six lives; 15 residents and a firefighter were injured and London Fire Brigade were required to assist a further 40 residents to safety. Along with loss of life and injuries, over 90 families had to vacate their homes as a result of the fire.

2. Terms of reference

- 2.1 In the immediate aftermath of the fire the Secretary of State for Communities and Local Government, John Denham MP asked the Chief Fire and Rescue Adviser, Sir Ken Knight to undertake an independent overview of the investigations into the fire, to report back on progress and emerging findings as a matter of urgency.
- 2.2 The terms of reference for the review included the fire safety matters applicable to this type of building and operational procedures and practices for this type of incident.

3. Scope

- 3.1 The following scope of the review was agreed:
- 3.1.1 To consider the emerging fire safety issues arising from this incident including:
- The application of the Building Regulations
 - The maintenance of the building including any upgrades and changes
 - The maintenance of the fire safety arrangements in the building
 - The advice given to the residents
 - The application of the Regulatory Reform (Fire Safety) Order
 - And the effect of the above on firefighting operations.
- 3.1.2 Whether the official investigations being undertaken relating to this incident provide all the information needed to inform future policy and procedures.
- 3.1.3 To consider the operational procedures at this incident in relation to the appropriateness of current national guidance, training and procedures.
- 3.1.4 To identify early lessons learned so they can be shared with stakeholders.

- 3.1.5 To identify potential wider implications for government or for the fire and rescue service for example, legislation or operational guidance
- 3.1.6 It is important to recognise that the terms of reference did not extend to the review of the operational performance of London Fire Brigade
- 3.2 It should also be recognised that the full investigations will lead to a judicial process including a Coroner's Inquest and therefore this review is not intended to prejudice the outstanding investigations.

4. Review methodology

- 4.1 The Chief Fire and Rescue Adviser (CFRA) and the CFRA review team arranged and attended meetings with a range of internal and external stakeholders including:
 - London Fire Brigade
 - Southwark Council
 - Harriet Harman MP – Constituency MP for Southwark
 - Metropolitan Police Service
 - Health and Safety Executive
 - Local councillors and London Assembly members.
 - Residents and tenants' representatives
- 4.2 The review team examined a range of documents including:
 - Current national operational guidance relating to high-rise, incident command and breathing apparatus
 - Legislation relevant to this incident
 - Media reports
 - Initial investigation reports
 - Reports relating to similar fires in the UK and overseas
 - Select Committee reports
- 4.3 To assist the Chief Fire and Rescue Adviser in producing his report a small technical panel was assembled to review the fire safety considerations following the fire at Lakanal House.

5. Emerging issues and areas for consideration

5.1 Investigations

5.1.1 Emerging issues

It is understood that the Metropolitan Police Service, Health and Safety Executive and LFEPA are considering areas of investigation and whether potential conflict arises where the body responsible for the enforcement of legislation may also be also subject to investigation.

In the case of the Fire Safety Order it is recognised that the London Fire and Emergency Planning Authority (LFEPA) is able to transfer its responsibility for the investigation and enforcement of the Fire Safety Order to the Health and Safety Executive under Article 26(3) of the Order.

The scope of the ongoing investigation currently appears to embrace the wider issues arising from this incident.

5.1.2 Areas for consideration

- *That the Chief Fire and Rescue Adviser will maintain strategic contact with the key investigators regarding the progress and emerging findings, which may have implications for policy and/or national guidance.*
- *That the Coroners' Inquest should be sufficiently wide in its scope to enable lessons learnt from this incident to be used to improve fire safety and firefighting operations to ensure the safety of the occupants of this type of building.*

5.2 Advice to occupants

5.2.1 Emerging issues

There is a long and established principle that the design and construction of high rise buildings enable the occupants adjacent to the immediate fire area to make their way to a place of safety, while other occupants can remain safely within their homes. However, these principles do require that a satisfactory level of passive and active fire safety systems are installed and maintained and the occupants are fully conversant with the fire safety arrangements of the building.

While including the fire safety arrangements in tenancy agreements may fulfil the legal obligations regarding advice to tenants/residents, it is unlikely to be the most effective way to ensure that all the occupants are conversant both with actions to be taken and the fire safety strategy behind these arrangements. Ensuring that the tenants are aware of the importance of issues such as fire-resisting doors, self-closing devices, escape routes and that common areas are maintained and kept clear, is as important as their actions if a fire occurs.

There is a need for more innovative ways of ensuring tenants are aware of the fire precautions in social housing. Engagement through the tenants/residents association has the potential to form an important bridge between the housing authority and the tenants/residents themselves. This is recognised by the London Borough of Southwark which is actively considering different ways of improving tenant awareness and their engagement in fire safety matters.

It is apparent that the fire safety advice available to occupants in some high-rise residential buildings is not consistent.

5.2.2 Area for consideration

- *Consideration should be given to undertaking a review of information available nationally for occupants of high-rise residential premises to ensure that there is a consistency of guidance in terms of what actions should be taken when a fire occurs within their building. Any review should be undertaken with key stakeholders including the fire and rescue service, housing associations, landlords and tenants' representatives.*

5.3 Internal and external fire spread

5.3.1 Emerging issues

Although the cause of the fire at Lakanal House has been identified, the fire development and fire spread is unusual. The initial investigations have not as yet been able to identify the mechanisms that caused the fire development or spread.

The principles of fire safety and firefighting in the UK are based on containment of the fire within a compartment. It is therefore important that there is a full understanding of how and why the fire developed and spread to ensure that this principle remains sound.

It is anticipated that the outcome of the investigations will inform the question of the internal passive fire protection and external fire spread and will be used to provide appropriate guidance on modification and refurbishment of premises and to improve operational guidance to fire and rescue services.

5.3.2 Area for consideration

- *Depending on the outcome of the full investigation, if the information proves to be inconclusive or insufficient it may be necessary to commission further specific research.*

5.4 Passive fire protection

5.4.1 Emerging issues

The protection incorporated into the design and fabric of the building is the fundamental basis for reducing the spread of fire and loss of life.

In undertaking major changes and refurbishment work in such buildings, the significance of the passive fire protection is required to be clearly specified and understood by the main contractor for the work, as well as those installing or altering the protection.

It remains important that products used in fire safety protection meet recognised industry specifications and that they are installed by suitably competent people who fully recognise the significance of the fire safety measures being installed.

5.4.2 Area for consideration

- *The passive fire protection industry produces a comprehensive range of guidance and technical information on passive fire protection products, installation and standards. Consideration should be given to reminding specifiers, main contractors and installers and those responsible for building safety management of the need to use the available information when undertaking works where measures that form passive fire protection are removed, altered or replaced.*

5.5 Active fire protection

5.5.1 Emerging issues

Active fire protection measures offer a valuable part of the holistic fire safety measures in the building to prevent loss of life and spread of fire.

Early detection and warning of fire is essential to ensure that occupants at immediate risk are able to safely leave their home.

There is significant evidence of the effectiveness of fire suppression systems in controlling fire and fire spread in buildings. It has been a requirement since 2006 that all new

residential buildings over 30m in height must be fitted with a fire suppression system, therefore if a building such as Lakanal House were built against today's standards a fire suppression system would be required.

It is not considered as practical or economically viable to make a requirement for the retrospective fitting of fire suppression systems to all current high-rise residential buildings. However it is a matter for individual housing owners and landlords to decide if automatic fire suppression is required as part of their fire safety strategy based on their fire risk assessment.

If the fire at Lakanal House had occurred during the hours of darkness there is a concern that the means of escape within common areas may not be provided with sufficient illumination or directional escape signage for residents. Within current guidance there is an expectation for such provision, however it appears that this may not be fully understood by the responsible person.

Although major works had recently been completed in Lakanal House, including the fitting of fire detection and alarm systems in individual dwellings, evidence suggests that other high-rise residential buildings may not be afforded the same level of protection.

5.5.2 Areas for consideration

- *As an interim measure consideration should be given to fitting battery operated smoke detectors in all existing high-rise social housing occupancies at each level of the dwelling in compliance with current standards.*
- *Consideration should be given at the time of major refurbishment or upgrading of the electrical installation, to ensuring that the active fire protection systems are upgraded as appropriate, in particular:*
- *the installation of hard wired smoke detector(s) at each level within each dwelling in compliance with current standards and,*
- *using the existing knowledge and emerging technology now available, consideration should be given to providing a link between the individual dwelling and an alarm receiving centre ensuring prompt and accurate call to the fire and rescue service. Such systems also allow for a manual, pre-determined delay of the call transmission to prevent unwanted false alarms.*
- *Consideration should be given to reminding local housing authorities of their responsibilities for fire safety management within shared and common parts of a building, with an emphasis on the need for suitable illumination, including provision of emergency lighting and signage to assist occupants to escape safely in case of fire.*

5.6 Operational guidance

5.6.1 Emerging issues

The Chief Fire and Rescue Adviser team has conducted a preliminary review of the national operational guidance relating to high-rise buildings, the incident command system and breathing apparatus procedures.

From this preliminary review there appears to be no urgent or immediate requirements for current national operational guidance to be significantly changed. However, there are some indications that this guidance will need further clarification and additional information particularly in the areas of simultaneous multi-level fires, fire behaviour within high-rise buildings, safe systems of work and systematic search procedures.

The premises information available for effective firefighting is obtained through the gathering of information from visits undertaken by fire and rescue services under the auspices of section 7(2) d of the Fire and Rescue Services Act 2004.

In complex buildings it is appropriate that details of the layout and risk associated with the building are available at the incident for command and control purposes.

5.6.2 Areas for consideration

- *Consideration should be given to revising and refreshing current national Operational Guidance once the full operational findings are available. This may require some additional research to ensure that the most appropriate information is used to inform the revision of the Guidance.*
- *The Chief Fire and Rescue Adviser has a responsibility within the Fire and Rescue National Framework to develop and produce Operational Guidance and it would therefore be appropriate that this revision is undertaken through this arrangement.*
- *Consideration should be given by fire and rescue authorities as to how risk-critical information on complex and high rise buildings is made readily available to operational firefighters at an incident, e.g. on site in secure premises information boxes, mobile data systems.*

5.7 Regulatory Reform (Fire Safety) Order 2005

5.7.1 Emerging issues

There is a requirement in the Fire Safety Order (FSO) to appoint one or more competent persons to assist the responsible person in undertaking the preventable and protective fire safety measures within premises. However, there is no similar requirement for a competent person to be appointed to assist in making a suitable and sufficient risk assessment.

It is important that assurance be given to both the responsible person for the premises and the enforcing authority that a risk assessment has been undertaken by a competent person, particularly in relation to high risk premises.

5.7.2 Areas for consideration

- *Consideration should be given to conducting a review as to how the responsible person under the Regulatory Reform (Fire Safety) Order 2005, can be assured that their assessment of risk is suitable and sufficient, particularly where the premises is of a higher risk. This assurance is particularly important where the responsible person may be relying on using someone else to undertake the risk assessment*
- *Where appropriate, the current Fire Safety Order guidance would need to be amended accordingly.*

5.8 Decent Homes programme

5.8.1 Emerging issues

Lakanal House was subject to a major refurbishment under the Communities and Local Government Decent Homes programme.

The Decent Homes programme does not cover all aspects of the building nor is it funded to do so. However, in carrying out improvements under the Decent Homes programme, local authorities can use the opportunity to do additional work.

The guidance on Decent Homes states that all dwellings should be free from category one hazards as assessed under the Housing Health and Safety Rating System. This system is a tool to assess the potential health and safety risks in homes, and includes an assessment of the risk from fire. Category 1 hazards include the most significant risks that can result in death or major injury and health issues.

Decent Homes focuses on the dwelling itself – it is not concerned with the common parts of buildings and so these aspects of fire safety would not be included. While the Housing Health and Safety Rating System does take into account the whole building, the current guidance for this process does not appear to provide adequate advice on the fire safety protective measures required in dwellings nor is there reference to fire safety guidance or the requirements under the Regulatory Reform (Fire Safety) Order 2005.

Guidance on fire safety in certain types of housing was made available to enforcers and landlords in July 2008 by the Local Authority Coordinators of Regulatory Services (LACORS), the Chartered Institute of Environmental Health (CIEH) and the Chief Fire Officers Association (CFOA), following initial guidance on the Housing Health and Safety Rating System issued by the Office of the Deputy Prime Minister in February 2006.

The reforms to the council housing finance system set out in the consultation document *Reform of Council Housing Finance* issued by the Housing Minister John Healey MP, on 21 July, includes the commitment to improve the common areas of estates and will ensure that there is sufficient funding in the new system to do so. The aim in setting up the self-financing system is to ensure that it delivers in the future the investment needed to sustain and maintain the existing stock of council homes.

5.8.2 Areas for consideration

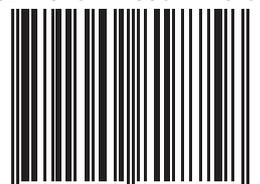
- *Consideration should be given to reviewing criteria requirements within the Housing Health and Safety Rating System to ensure that the safety critical elements of passive and active fire safety measures are included as well as the need to include an assessment of the fire protection measures necessary in the common parts of the building.*
- *It is considered beneficial to undertake a review of the relationship between the Decent Homes programme and the Housing Health and Safety Rating System to ensure that the requirements under the Regulatory Reform (Fire Safety) Order 2005, to carry out a suitable and sufficient risk assessment, are consistent and refer to the availability of guidance on fire safety in certain types of housing issued by Local Authority Coordinators of Regulatory Services, the Chartered Institute of Environmental Health and the Chief Fire Officers Association.*
- *Consideration should be given to reminding local housing authorities and fire and rescue authorities of the expectations for strategic, tactical and individual joint consultation on fire safety issues as contained within Local Authority Coordinators of Regulatory Services guidance.*
- *Consideration should be given to reviewing the weighting that fire safety is given under the Decent Homes programme to include fire safety matters such as:*
 - *The installation of hard wired smoke detector(s) at each level within each dwelling in compliance with current standards.*
 - *Consideration given to providing a link between the individual dwellings and an alarm receiving centre.*
 - *Maintaining the inherent passive fire safety principles of the building e.g. fire resisting doors, fire stopping provision, smoke ventilation.*
- *Consideration should be given to including the fire safety features required in the common areas of high rise blocks of flats residential dwellings in the outcomes of the Reform of Council Housing Finance consultation.*

6. Conclusions

- 6.1 Fortunately a fire of this type and with such tragic outcomes is a very rare event in England or the UK. The vast majority of fires in homes are contained within the compartment where the fire first starts. This fire was unusual in many ways and lessons learnt from further investigation into this incident must be used to improve fire safety and firefighting operations in this type of building to ensure the safety of its occupants.
- 6.2 At the outset of the review it was recognised that the outcome would be limited to emerging findings rather than an anticipated outcome of the full investigation.
- 6.3 Nevertheless I am confident that within the time available the significant early issues have been identified together with associated areas for consideration arising from the findings.
- 6.4 I hope that the scope of the subsequent Coroners' Inquest will be wide enough to cover all aspects of this tragic incident to satisfy both the concerns of the local community and to ensure that lessons can be learnt for the future.
- 6.5 I am content that the request made by the Secretary of State is discharged by this report.

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