

<b>Item No.</b> 20.	<b>Classification:</b> Open	<b>Date:</b> 10 December 2013	<b>Meeting Name:</b> Cabinet
<b>Report title:</b>		Lakanal Inquiry – Sprinkler Feasibility Study	
<b>Ward(s) or groups affected:</b>		All	
<b>Cabinet Member:</b>		Councillor Ian Wingfield, Deputy Leader and Cabinet Member for Housing Management	

## **FOREWORD - COUNCILLOR IAN WINGFIELD, DEPUTY LEADER AND CABINET MEMBER FOR HOUSING MANAGEMENT**

The inquest into the fire at Lakanal reviewed all of the factors which contributed to the tragedy, including areas where the council had failed. The Coroner made a number of recommendations for the council, to address the failures, to review our working practices and the information, advice and guidance the council provides to make sure that the safety and well-being of our residents is fully protected into the future.

When reviewing the recommendations, I am constantly mindful of the responsibility the council has as a landlord to keep our residents and homes safe. Some of the recommendations have already been completed by the council, not least because of the dedicated fire safety team which already coordinates the council's landlord responsibilities for fire safety, while other recommendations that take a little longer to fully complete are well underway.

The report to Cabinet on 14 May 2013 covered the council's response to the Coroner regarding all her recommendations. While this report concentrates on the Coroner's recommendation that the council considers the question of retro fitting sprinklers to high rise residential blocks, it also gives an update on progress with all the recommendations.

## **RECOMMENDATIONS**

That Cabinet

1. Notes and approves the contents of this report.
2. Approves the installation of sprinkler systems in all existing sheltered housing schemes by September 2016, and any built in the future, using the option 1 model set out in paragraph 39.
3. Approves the installation of sprinkler systems in all existing temporary accommodation hostels by September 2016, and any built in the future, using the option 1 model set out in paragraph 39.
4. Approves the installation of LD2 type automatic battery powered smoke/heat detection to all the council homes forming part of this study by March 2015.

5. Approves the installation of LD2 type automatic battery powered smoke/heat detection to council homes across the borough over the next 10-15 years through the major works investment programme.
6. Instructs the Strategic Director of Housing and Community Services to explore ways in which leaseholders could be provided with similar early detection and warning, considering the likely funding, management and other issues.
7. Instructs the Strategic Director of Housing and Community Services to work with the Southwark SAIL (safe and independent living) project in order to consider alternative fire safety solutions for vulnerable residents, as set out in paragraphs 52 and 53.

## **BACKGROUND INFORMATION**

8. The Lakanal fire on 03 July 2009 in which six people died was a dreadful tragedy and one of the darkest days in Southwark's recent history. In response to the fire the council made a number of improvements to its management of fire safety, including:
  - the creation and establishment of the in-house fire safety team;
  - the immediate undertaking of the programme of Fire Risk Assessments (FRAs) to all blocks of five storey and above, completed by April 2010;
  - the prioritisation of FRA works carried out, with £48m spent/committed to date;
  - the professionalisation of the FRA responsibility, with the in house fire safety team having responsibility for blocks of four storey and above and new FRAs completed in March 2013;
  - achieving full compliance with the Regulatory Reform (Fire Safety) Order 2005 (the legislation which governs the need for fire risk assessment) by having suitable and sufficient FRAs in place for all blocks where required;
  - the forging and maintenance of a strong relationship with the London Fire Brigade (LFB) operationally and strategically, initially with the co-signed Memorandum of Understanding;
  - clear advice, information and guidance given to residents including use of secondary means of escapes, the removal of grilles and gates, the need for clear walkways, stairs and common areas, the disposal of refuse;
  - working toward a strategy for enforcing fire regulations in leasehold properties sub-let as Houses in Multiple Occupation (HMOs).
9. The Coroner's inquest into the tragedy commenced on 14 January 2013 and narrative verdicts were returned by the jury on 28 March 2013.
10. Pursuant to Rule 43 of the Coroners Rules (as amended), the Coroner wrote to the London Borough of Southwark on 28 March 2013.
11. The Rule 43 letter recognised steps the council had already taken since the tragedy, however it also made a number of recommendations.
12. Rule 43A of the Coroner's Rules required that the council respond to the coroner within 56 days starting from the day the report was sent to the chief executive of the council.

13. The council responded on 23 May 2013 with details of action that had been taken and which would be taken.
14. In its response the council firstly defined high rise buildings as being those above 30m, equating to those of 10 storey and above, and advised that it would also apply the coroner's recommendations to known lower storey but complex blocks, i.e. those with more than one means of escape, along with the council's sheltered housing schemes and temporary accommodation units.
15. Attached as Appendix 4 is an update which shows the good progress made against all of the recommendations, and for those not yet completed the timescales for their completion.
16. The council's response to the last and most significant recommendation that "the authority consider the question of retro fitting of sprinklers in high rise residential buildings", advised that the council would undertake a full feasibility study which would conclude within 6 months.
17. To this end, and following the standard procurement process, an independent consultant, the Frankham Consultancy Group, was engaged to undertake the feasibility study.
18. The final feasibility report was received on 28 November 2013, and the report and recommendations are summarised below. Appendices 1, 2 and 3 refer.

#### **KEY ISSUES FOR CONSIDERATION**

19. The most significant recommendation is that the coroner asked the council to consider the question of retrofitting sprinkler systems to high rise residential buildings. The same recommendation was made in the Rule 43 letter relating to the inquest into the tragic deaths of two fire fighters in Southampton, which recommended that "Social housing providers should be encouraged to consider the retro-fitting of sprinklers in all existing high rise buildings in excess of 30 meters in height".
20. The installation of sprinkler systems into newly built high rise blocks with a floor or floors over 30m in height is required by the Building Regulations and should be installed in individual properties and in some rare cases to the common areas of high risk buildings. This is because the point of origin of most fires is in individual dwellings. This is confirmed in the Building Regulations 2000 Approved Document B, section 8.14 and also in BS 9991: 2011.
21. There is currently no legal requirement to install sprinkler systems in existing buildings unless the height is increased to over 30m.

#### **Feasibility report**

22. The feasibility study looked at the requirements for the blocks described in paragraph 14 above, taking into account the complexities of the blocks, their design intent and existing fire safety features and arrangements, as well as thorough research into best practice and guidance from the government and fire authorities.

23. The report recommendation rationale is based on the guidance provided by the London Fire and Emergency Planning Authority (LFEPA) and this was used to determine where it would be most advisable to install sprinkler systems.
24. The LFEPA guidance advocates the provision of sprinklers in domestic dwellings where the most vulnerable residents live.
25. The feasibility report takes all the above into account and tailors its recommendations to those residents who would be unable to self evacuate if their homes were directly affected by smoke or fire.
26. The report recommendation rationale also indicates the need for the building compartmentation to be sufficient, and supports a stay put policy with a recommendation of the installation of LD3 heat and smoke detection and warning systems as a minimum. LD3 systems provide early warning that enable residents to self evacuate in the event that their home is directly affected by smoke or fire, and are installed in the circulation areas of the dwelling, i.e. hallways, landing, stairs etc.
27. The report recognises that the council's Sheltered Housing schemes house large numbers, or are entirely made up of the most vulnerable residents.
28. The report notes that the council's temporary accommodation hostels often house vulnerable residents, the transiency of residents, and the difficulties experienced in operating the evacuation policy.
29. The report also notes that the numbers and locations of vulnerable residents in the general needs stock are very fluid and are widely dispersed.
30. The report recognises the major work done, being done and planned to be done, to the passive measures in the stock, and the recommendations are based on the compartmentation being sufficient.
31. The report recommendations are as follows:
  - Install sprinkler systems in all sheltered housing schemes;
  - Install sprinkler systems in all temporary accommodation hostels;
  - There is no recommendation for block wide sprinkler installation in general needs blocks, however the report recommends that the council should consider the installation of personal protection sprinkler (PPS) systems to the homes of vulnerable residents who would be unable to self evacuate;
  - Strongly recommends the minimum of the installation of LD3 type automatic fire detection (smoke/heat detectors) to all the dwellings in general needs blocks.
  - The report notes that sprinklers would need to be fitted to any additional floors if/when constructed to blocks over 30m, or if becoming over 30m as a result of the construction of additional floors.

## **Personal protection sprinkler systems**

32. Officers have considered the personal protection system recommendation but do not recommend pursuing it for the following reasons:
- The personal protection sprinkler (PPS) system recommended is a relatively new development and further research is required
  - Aesthetically the PPS system presents problems due to the size and weight of the water tank, the floor space required, and its associated pipework
  - In some circumstances these systems are not guaranteed to save lives as it is normally smoke that kills
  - The effects of a triggered sprinkler system on medical needs, life support, medical equipment
  - Further consideration required regarding the ability of residents to raise an alarm
  - Further consideration required regarding the ability of residents to evacuate
  - Further consideration required regarding the level of assistance, family or other, available to the resident
  - The fire services ability to rescue
  - Existing passive protection within the dwelling may be sufficient, and where not could be improved
  - The transient nature of some vulnerabilities – some people move in and out of vulnerability
  - The costs of installation and ongoing maintenance of systems
  - The fact that the council has no right of access to install PPS systems in leasehold properties
  - Overall management and co-ordination would be problematic due to the annual turnover of the tenanted population (c. 2000 voids per annum), transfers, the measurement of temporary vulnerability.

## **LD3 type heat and smoke detection**

33. While the feasibility report recommends the installation of LD3 type system which is positioned in the dwelling circulation areas only, the in-house fire safety team strongly recommends enhancing the coverage to an LD2 type. The LD2 type is installed in all habitable rooms, i.e. living rooms, bedrooms, and a heat detector in the kitchen. Officers consider that this helps to further mitigate any risk of not installing any type of sprinkler system in general needs blocks. It also serves to quickly alert residents of a fire situation anywhere within their dwelling.
34. The entire LD2 system can be silenced using a hush provision installed as part of the system which provides residents with the facility to silence the system in the event of a false alarm.
35. Officers also consider that LD2 type detection should be installed, where not already, to all other council owned dwellings in the borough over 10-15 years through the investment programme. The worst case cost scenario for this would be £32.338m (based on the average costs in paragraph 41) if applied to all remaining stock including leaseholders.
36. Exploration and consideration should be given to how leaseholders could be provided with similar early detection and warning, in order that the council ensures the life safety of all of its residents, and applies a consistent approach to

all the dwellings for which it is the freeholder, rather than ‘pepper-potting’ across the stock.

37. Officers acknowledge the issues in providing such systems to leaseholders, including that of obligations under the terms of the lease, future maintenance and management of the systems and their required funding stream (General Fund), but on balance recommends that for the reasons set out in paragraph 36 above all options be explored and considered.
38. It should be noted that the detector heads forming part of early detection and warning systems, whether hard wired or battery powered, have a life of approximately 10 years before requiring replacement. This may change with future advances in the technology.

## Costs

### Block sprinkler systems

39. Indicative block sprinkler installation costs have been provided as part of the feasibility study and these are based on two main options – option 1 is for boxed in pipework, and option 2 is for false ceilings (where possible) which would be more aesthetically pleasing. The report costings also identify an alternative solution that pipework can sometimes be routed through floor and ceiling voids. This alternative is rare, but where it is possible costs can reduce, although not significantly, and in some cases rise due to the need to remove and replace floorboards and floor coverings. The installation costs and indicative costs for the annual repair and maintenance are as follows:

#### i) Sheltered Housing schemes

Option 1	Option 2	Annual repair & maintenance
Total cost	Total cost	
<b>£3,318,000</b>	<b>£8,473,000</b>	<b>£14,300</b>

#### ii) Hostels

Option 1	Option 2	Annual repair & maintenance
Total cost	Total cost	
<b>£1,645,000</b>	<b>£2,182,000</b>	<b>£10,800</b>

40. The above costs include a 15% asbestos management/removal contingency, but exclude professional fees, VAT and any temporary relocation costs.
41. Average costs for the installation of LD2 type automatic battery powered systems, based on 6 rooms in each dwelling, are shown below:
- £703 per dwelling
  - Equating to an estimated £3.588m across all of the tenanted dwellings in the general needs blocks described in paragraph 14 above (and assuming that none are installed currently)

- Equating to an estimated £23.931m when rolled out to the remainder of the tenanted stock through the major works investment programme (and assuming that none are installed currently).

42. Officers would therefore recommend:

- a) Installation of sprinkler systems in all sheltered housing schemes using the option 1 model by September 2016;
- b) Installation of sprinkler systems in all temporary accommodation hostels using the option 1 model by September 2016;
- c) Installation of sprinkler systems to any new sheltered housing schemes and temporary accommodation hostels built by the Council.
- d) Installation of LD2 type automatic battery powered smoke/heat detection to all the council homes forming part of this study by March 2015.
- e) Roll out installation of LD2 type systems to council homes across the borough through the major works investment programme over the next 10-15 years.
- f) Exploration and consideration of ways in which leaseholders could be provided with similar early detection and warning.

### **Policy implications**

43. The recommendations may require the revision of a number of policies which will be considered in line with the feasibility study and the recommendations of this report.

### **Community impact statement**

44. The Coroner's recommendations impact on all residents of the council's housing stock.

### **Financial implications**

45. The recommendations include the installation of sprinkler systems in all sheltered housing schemes and temporary accommodation hostels at an estimated cost of £4.963m by September 2016 (option 1). It also recommends the installation of LD2 type automatic battery powered smoke/heat detection to general needs tenanted properties identified in the report initially, at a further estimated cost of £3.588m by March 2015. This will then be followed by a wider roll-out across the remaining tenanted stock over the medium-term as part of the major works programme, estimated at £23.931m. The indicative costings are estimated using a borough wide average of £703 per property.

46. The equivalent cost of installing these measures into leasehold stock is estimated at £9.670m and would in the event fall to the council's general fund as highlighted by the director of legal services and head of specialist housing services.

47. There are currently no resources specifically identified within either the housing revenue account (HRA) or housing investment programme (HIP), or the council's general fund for these works. Resources totalling £8.551m are required over the period (2013/14 to 2016/17) for the items recommended at paragraphs 2 to 4 of this report, (excluding leasehold properties). Therefore, the immediate priority will be to identify resources to enable the programme to commence as soon as is practicable in the New Year subject to cabinet approval. The table below refers.

There is also a minor on-going revenue commitment identified of £25k which can be contained within the existing HRA repairs and maintenance budget.

	Capital Tenanted Stock £'000	Capital Leasehold Stock £'000	Total Estimated Cost £'000
(A) Installation of sprinkler systems in all existing sheltered housing (option 1)	3,318	0	3,318
(B) Installation of sprinkler system in all existing temporary accommodation hostels (option 1).	1,645	0	1,645
(C) Installation of LD2 type smoke/heat system to all general needs blocks forming part of this study	3,588	1,263	4,851
1D) Installation of LD2 type smoke/heat system to council homes across borough.	23,931	8,407	32,338
<b>Total cost of recommendation shown in this report</b>	<b>32,482</b>	<b>9,670</b>	<b>42,152</b>

48. It should also be noted that this represents an on-going funding commitment as there is a requirement to replace the units after a period of approximately 10 years.

## **SUPPLEMENTARY ADVICE FROM OTHER OFFICERS**

### **Head of Specialist Housing Services**

49. The Head of Specialist Housing Services concurs with the recommendation to install sprinkler systems in all existing sheltered housing schemes and temporary accommodation hostels, and recommends that this should be incorporated into the current programme of major works for the sheltered housing schemes.
50. The recommendation to explore and consider ways in which leaseholders could be provided with similar early detection and warning as offered by the LD2 type automatic battery powered smoke alarms/heat detectors is noted. Under the terms of the lease the council has no right to install these alarms within individual leasehold properties, and would have no right to enforce either inspections or future maintenance and management of the systems. Officers from Home Ownership Services should be involved in any future discussion on this issue.
51. The installation of smoke alarms/heat detectors to leasehold properties is not a landlord obligation under the terms of the lease and therefore the costs of supply and installation could not be recovered as a service charge. If the council proposed to install smoke alarms/heat detectors to leasehold properties any costs will be borne by the General Fund because the interior of the flats have been disposed of and fall outside the HRA, unless leaseholders are charged the full cost on an ad-



hoc basis. It should also be noted that many leasehold properties have been sub-let, providing the homeowner with an income stream. In addition, many of these properties are owned by companies and many have been let as Houses in Multiple Occupation. To provide smoke alarms/heat detectors to all leasehold properties except at full cost would lead to the council subsidising home ownership not just for resident leaseholders but also those who are making a profit from ownership.

### **Strategic Director of Children’s and Adults’ Services**

52. Southwark SAIL (safe and independent living) is a partnership based scheme hosted and co-ordinated by Age UK Southwark Lewisham. The scheme has a strong focus on safety around the home and the Fire Service are key partners in this scheme. The scheme works by providing all partners who may come into contact with vulnerable and older people during their daily work with a check sheet of key risks to look for and asks partners to seek residents permission to note key information down and pass this on to AgeUK so that they can then co-ordinate input from the partnership around issues such as fire safety, isolation, fear of crime and wider support and links from community groups and more specialist social care and health services.
53. It is therefore suggested that members consider agreeing a recommendation that requires officers to actively work with the SAIL project to identify vulnerable people who may benefit from alternative fire safety solutions in order to strengthen the mitigation against not recommending the installation of Personal Protection Sprinkler Systems.

### **Director of Legal Services**

#### The Fire Safety Order

54. The Regulatory Reform (Fire Safety) Order 2005 (the “Order”) imposes a number of duties on the Council to protect persons on the common parts of the Council’s housing stock and those in the immediate vicinity who are at risk from fire (referred to in the Order as “relevant persons”), in so far as the requirements are within the Council’s control.
55. The duties imposed by the Order include duties to:
  - Take such general fire precautions as are reasonably required to ensure that the premises are safe;
  - Carry out a suitable risk assessment to identify the appropriate fire precautions to take at each premises, and keep such assessments up to date;
  - Make arrangements for the planning, control, and review of preventive and protective measures, including appointing competent persons to manage this;
  - Provide appropriate fire fighting equipment and implement appropriate measures for fire-fighting;
  - Comply with requirements in the Order for emergency routes and exits including indication by signage;
  - Establish procedures to be followed in the event of serious and imminent danger; and
  - Keep premises and fire-fighting equipment in good repair and working order to safeguard relevant persons.

56. It is an offence to fail to comply with these duties where that failure places one or more relevant person at risk of death or serious injury in case of fire.

#### Occupiers Liability Act 1957

57. Section 2 of the Act stipulates that the Council as “occupier” of tenanted and leased properties owes the “common duty of care” to “visitors”, which will include tenants and leaseholders as well as other people permitted to be on the premises.
58. The common duty of care is a duty to “take such care as in all the circumstances of the case is reasonable to see that the visitor will be reasonably safe in using the premises for the purposes for which he is invited or permitted by the occupier to be there”.
59. The actual steps required from the Council to discharge the duty will depend on the degree of control which the Council has over the premises, among other things. For example the Council has much wider rights to enter and make alterations to tenanted properties than it does in relation to leasehold properties, so that the standard of care required in connection with leasehold flats will be lower. Resource implications will also be a relevant factor.

#### Housing Revenue Account / General Fund

60. Section 74 of the Local Government and Housing Act 1989 (the “Act”) sets out the local housing authority’s obligation to establish and maintain an account of sums falling to be credit or debited with respect to its general housing stock, and related matters. This account is known as the Housing Revenue Account (“HRA”).
61. Section 74(3) of the Act provides that this does not apply to “land, houses or other buildings disposed of by the authority”. This will include houses and flats disposed of by the local authority by way of sale of the freehold or by a grant of a long lease. Therefore it will not apply to homes purchased under the “Right to Buy” programme.
62. Part II of Schedule 4 of the Act sets out the types of expenditure which may be debited to the HRA. So far as is relevant to this report, the relevant item is item 1: “the expenditure of the authority for the year in respect of the repair, maintenance, supervision and management of houses and other property within the [HRA]”.
63. As regards the cost of installation of sprinklers and smoke/heat detectors in sheltered housing schemes, temporary accommodation hostels, and homes let by the Council to secure tenants, this expenditure clearly falls within the HRA.
64. As regards leaseholders, the interiors of their homes are excluded from the HRA by virtue of section 74(3) of the Act, and therefore the cost could not properly be debited to the HRA and would be payable from the General Fund.

#### **Strategic Director of Finance and Corporate Resources (FC13/089)**

65. The report is requesting cabinet to approve various recommendations as reflected in paragraphs 1 to 7, following the Lakanal Inquiry and the feasibility report.

66. The financial implication in paragraphs 45 to 48 provides details of the cost implications of the recommendations. It is noted that there are no provision within the current Housing Investment Programme or Housing Revenue Account to fund the proposals. These will need to be added to the programme once approved and funding identified in the budget setting process.
67. Regular and close monitoring of the programme cost will be required to ensure that the council's overall capital programme can be funded within the available resources.
68. It is also noted that the on going revenue implications of maintenance costs will be contained within the existing Housing Revenue Account budgets.
69. Staffing and any costs connected within this recommendation to be contained within existing departmental revenue budgets.

#### REASON FOR URGENCY

70. The council committed to undertake a 6 month feasibility study ending in November 2013 and to report back to cabinet at the meeting following which is 10 December 2013. The next cabinet meeting after the 10 December is not until the end of January 2014. In light of the sensitivities and importance of addressing the coroner recommendations and significant public interest the council needs to respond to the recommendations as soon as possible.

#### REASON FOR LATENESS

71. The consultants' final feasibility report was received on 28 November and officers needed time to consider the recommendations.

#### BACKGROUND DOCUMENTS

Background Papers	Held At	Contact
Coroners Rule 43 letter	160 Tooley Street London SE1 2QH	Tony Hunter, Tel: 020 7525 1756
<b>Link</b> <a href="http://moderngov.southwark.gov.uk/ieListDocuments.aspx?CId=302&amp;MId=4253&amp;Ver=4">http://moderngov.southwark.gov.uk/ieListDocuments.aspx?CId=302&amp;MId=4253&amp;Ver=4</a> (see Item 21 – Appendix 1)		
Report to Cabinet 16 April 2013	160 Tooley Street London SE1 2QH	Tony Hunter
<b>Link</b> <a href="http://moderngov.southwark.gov.uk/ieListDocuments.aspx?CId=302&amp;MId=4253&amp;Ver=4">http://moderngov.southwark.gov.uk/ieListDocuments.aspx?CId=302&amp;MId=4253&amp;Ver=4</a> (see Item 21)		
Report to Cabinet 14 May 2013	160 Tooley Street, London SE1 2QH	Tony Hunter
<b>Link</b> <a href="http://moderngov.southwark.gov.uk/ieListDocuments.aspx?CId=302&amp;MId=4254&amp;Ver=4">http://moderngov.southwark.gov.uk/ieListDocuments.aspx?CId=302&amp;MId=4254&amp;Ver=4</a> (see Item 10)		

Background Papers	Held At	Contact
Council response to Coroner – Letter of 23 May 2013	160 Tooley Street London SE1 2QH	Tony Hunter
<b>Link</b> <a href="http://moderngov.southwark.gov.uk/ieListDocuments.aspx?CId=302&amp;Mid=4553&amp;Ver=4">http://moderngov.southwark.gov.uk/ieListDocuments.aspx?CId=302&amp;Mid=4553&amp;Ver=4</a> (see Item 20)		

## APPENDICES

No.	Title
Appendix 1	Final feasibility report from Frankham Consultancy Group
Appendix 2	Feasibility report – block recommendation list
Appendix 3	Feasibility report – indicative costings
Appendix 4	Progress update on Coroners recommendations/council actions

## AUDIT TRAIL

<b>Cabinet Member</b>	Ian Wingfield, Deputy Leader and Cabinet Member for Housing Management	
<b>Lead Officer</b>	Gerri Scott, Strategic Director of Housing and Community Services	
<b>Report Author</b>	David Lewis, Head of Maintenance and Compliance	
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<b>Key Decision?</b>	Yes	
<b>CONSULTATION WITH OTHER OFFICERS / DIRECTORATES / CABINET MEMBER</b>		
<b>Officer Title</b>	<b>Comments Sought</b>	<b>Comments Included</b>
Director of Legal Services	Yes	Yes
Strategic Director of Finance and Corporate Services	Yes	Yes
Head of Specialist Housing Services	Yes	Yes
<b>Cabinet Member</b>	Yes	Yes
<b>Date final report sent to Constitutional Team</b>		6 December 2013