

# Overview & Scrutiny Committee

Thursday 13 July 2017

7.00 pm

Ground Floor Meeting Room G02A - 160 Tooley Street, London SE1  
2QH

## Supplemental Agenda

### List of Contents

Item No.	Title	Page No.
5.	Fire Safety	1 - 32
6.	SLaM Mental Health of Older Adults JHOSC - Terms of Reference	33 - 38
7.	Work Programme	39 - 40

	<b>Date:</b> 13 July 2017	<b>To:</b> Overview and Scrutiny committee
<b>Report title:</b>	Fire safety	
<b>From:</b>	Gerri Scott, Strategic Director of Housing and Modernisation	

1. Overview and Scrutiny committee (OSC) is asked to note the contents of this report.

#### Context

2. Following the tragic fire at Grenfell Tower in North Kensington, in the Royal Borough of Kensington and Chelsea on 14<sup>th</sup> June 2017, officers provided the Overview and Scrutiny Committee (OSC) with a verbal report on the 19<sup>th</sup> June about the council's position in relation to fire safety issues and particularly the fire safety measures that had been put in place since the terrible fire at Lakanal House in 2009.
3. Officers also provided responses to questions from committee members and Tenants Council members who were in the audience.
4. At that meeting, OSC agreed seven recommendations and these are set out below:
  - i. That the cabinet member orders a review of council high rise blocks in Southwark to ascertain the need for and cost of fitting sprinkler systems and any other fire safety measures in those buildings. OSC assumes wider government guidance will be given but this review should not be delayed while that guidance is forthcoming. We encourage Tenant Council to submit a letter to the cabinet member setting out any further representations on fire safety measures, and this should form part of the review
  - ii. The cabinet member should consider making all fire risk assessments for high rise flats above 7 floors public via the council's web site
  - iii. The cabinet member should encourage TRAs to hold local meetings with fire fighters to review their fire evacuation arrangements and check that access routes are clear.
  - iv. The cabinet member consults with Tenant Council in order to find appropriate representatives to accompany officers on site visits where testing of cladding and building materials is taking place.
  - v. The council reviews best practice and current procedure around fire safety relating to scaffolding used on council buildings
  - vi. That the appropriate cabinet member reviews internal guidance documents in respect of both new build and refurbishment projects to ensure they are up to sufficient standard in respect of fire safety.

- vii. That the leader and the cabinet member lobby the government to investigate and respond to the cause of the Grenfell fire quickly and provide funding for fire safety solutions.

#### Progress against OSC recommendations

5. Progress against each of the recommendations is set out below:

- i. The council has engaged the services of an industry expert independent consultancy, BB7, to undertake an independent fire risk management audit and a top down review of the council's fire safety processes and procedures. This will include a comprehensive audit of Southwark Council's fire risk Management System and an audit of the organisations fire risk assessment programme. BB7 will undertake an audit following a systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which the organisation complies with the requirements of legislation and national guidance.

The review will consider a mix of each type of location, along with a cross section of storeys and unit size and will include hostels, travellers sites, sheltered housing schemes, barrow stores, flat conversions and purpose built blocks ranging from low rise to the highest rise.

The sample locations will be selected randomly by BB7 and will comprise 36 locations in total. BB7 will undertake this work throughout August 2017 and will report back to the council through OSC in September 2017.

The Director of Communities is also establishing an independent resident advisory group to undertake a resident scrutiny review of how the council safeguards residents against the risk of harm due to a fire incident. This will be a task and finish group of no more than 10 residents that will gather evidence on

- the council's policies and procedures relating to fire safety.
- how fire safety is promoted to residents.
- what information residents are given on fire safety and the importance of issues such as keeping communal areas and corridors clear from obstructions.
- fire prevention, detection, warning and escape measures.

The Group will identify issues of concern to residents and make recommendations for addressing these.

- ii. Arrangements are in place for new FRAs for all blocks of seven storey and above to be available on the council's website. These will be available in the latter part of August 2017.

The council has a rolling programme of FRAs and performance for completion of these within target time is included in the departmental performance monitor which is reviewed on a monthly basis by the Housing and Modernisation departmental management team, and also by the Cabinet Member for Housing. Performance is currently green with 100% of FRAs completed within target time.

However, in view of the current fire safety concerns, the Fire Safety Team, irrespective of when the last FRA was carried out, has been asked to carry out a new FRA for each of our 174 tower blocks, together with the Repairs Compliance Team, so that any follow on repair issues can be immediately ordered.

At the same time, resident services officers will continue to carry out frequent checks of these blocks to address any management issues such as, dumped rubbish, obstructed access or general clutter.

This recommendation is being taken forward by the directors of asset management and resident services, Dave Markham and Paul Langford.

- iii. An initial meeting with Tenants and Residents Associations and members of the public took place on Monday 26<sup>th</sup> June, 7pm, hosted by the Fire Brigade, at the Old Kent Road fire station. Attendance was estimated at approximately 40 people.

Many issues and concerns were discussed, but most focussed on externally run gas pipework, stay put principles, smoke and fire detection, and compartmentation issues. It should be noted that the stay put policy was reaffirmed by LFB.

A separate issue regarding fire compartmentation in the Ledbury Tower Blocks was raised at that meeting and the council and the LFB response is covered in Appendix A to this report.

In the last few weeks, the Fire Safety team has been asked to attend numerous TRA meetings to give overview presentations on fire safety issues. These meetings will be publicised widely at estate level to provide local residents, over and above those involved in their TRA, with an opportunity to discuss fire safety issues. The dates for these meetings have been shared with the LFB so they can attend.

This recommendation is being taken forward by the director of communities, Stephen Douglass.

- iv. At the OSC meeting on 19<sup>th</sup> June, OSC members and representatives of Tenants Council expressed concern at the likely time it would take to test the cladding found at 4 low rise council blocks through the Department of Communities and Local Government's testing mechanism. In addition, the guidelines only require blocks 7 storeys and above, or higher than 18 metres, with cladding to be tested through this central government route, so the four blocks in Southwark's council housing stock would not comply.

Irrespective of the central government guidelines, where we identify any cladding on council blocks, we would want to be assured that the materials used would not compromise the safety of residents.

At the OSC meeting, there was a request from one member that the council should consider how residents could be involved in the independent verification of the testing of any cladding. Rather than delay the testing of samples by considering how to involve residents, the strategic director of housing and modernisation took the decision to send samples of the cladding from the four council blocks for testing to Bureau Veritas, a testing agency approved by the

LFB. Bureau Veritas were able to accept the panels immediately and as this is work commissioned and carried out by experts and not directly involving council officers, the strategic director advised the Chair of Tenants Council of this decision the same day.

The report has concluded that the exterior surfaces for Canute are robust and will withstand a fully involved compartment fire without spreading across the external surface.

Medina which is under 18 metres in height and compliant with building regulations will in the opinion of Bureau Veritas withstand a small fire in the building without spreading across the external surface of the building. In the event of a fully involved compartment fire the external surface of the cladding is likely to prevent the spread of fire. If the insulation material is exposed to that fully involved fire there is a possibility for fire spread across the face of the building. The report states that provided the insulation is sealed within the stainless steel facings there is likelihood that the insulation will remain completely protected. According to my surveyors it was and contractors who have been sent direct to site to check this have confirmed this.

We have checked the insulation on Medina House and it is sealed within the stainless steel facings, however we are going to take a 'belt and braces' approach and are carrying out a more thorough survey this week. We think that we should go over and beyond the current building regulations and are considering removing the panel system and replacing it with a fascia which is compliant with the regulations required for higher buildings.

- v. Officers have carried out an initial review of fire safety relating to scaffolding and can report as follows:

Essentially, contractors have comprehensive measures in place for managing the risk of fire in respect of their own operations during the course of their normal working day. However, these do not extend and are beyond the control of activities of building's occupants, particularly out of normal hours.

It is accepted that stringent measures are implemented and maintained to manage the risk of fire relative to scaffolding erected around occupied residential buildings. Going forward however, officers will consider the following areas in order to further reduce any residual risk:

- a) Traditional scaffolding (as is most commonly used on the Council's buildings) involves the use of timber boarding to form the working landings. Although this material is combustible, because of its type and composition, its flash-point and subsequent spread of fire, is low.

With industry developments, the use of metal boarding systems to form working landings is now a viable option available on the market that might be considered. It is cost effective but unfortunately is only suited to conventional building shapes, though it can be combined with traditional scaffolding for irregular shaped structures.

- b) Debris netting – that low or non-combustible products should always be the preferred option used by contractors.

- vi. A working group has been set up led by the Development Delivery Manager which will review the processes and procedures developed for the new build programme. This will include the overarching design standards for the new build programme, the detailed employers requirements, and bespoke procedures for the programme. In addition, the review will consider whether allowances will need to be made for future proofing developments to take into account potential changes in legislation, and will review the proposed on site quality control regime and whether additional resources are required to enhance this area.

A report will be prepared for the Lead Cabinet Members for Housing and Regeneration and New Homes by the end of August 2017.

A working group has been set up led by the Head of Investment to review current refurbishment specifications. The group will include technical staff, project managers and Fire Safety Team representatives and a draft report will be prepared for a wider group of managers in Asset Management and then the final report for the Lead Cabinet member for Housing by the end of August.

In addition to the above, officers also ensure that reviews are carried out of contractors' fire safety training and competence, and that they are up to expected standards and levels.

Officers will consider the fire safety of other high rise blocks across the borough and will request and review the fire risk assessments from housing association providers in the borough.

- vii A letter from the Leader of the Council and Deputy leader and Cabinet Member for Housing has been sent to the Secretary of State for Communities and Local Government. This is included at Appendix B.

## Appendix A

### Ledbury Estate Fire Safety Compartmentation Issues

In response to the issues raised by the tragic Grenfell Tower Fire, the council and the LFB jointly held a residents' meeting to listen to and respond to concerns about fire safety at the Old Kent Road Fire Station on Monday 26 June 2017.

At that meeting, a resident reported large cracks in her flat in one of the four Ledbury Towers on the Ledbury estate. She expressed concern that these cracks breached the compartmentation of her flat and therefore compromised fire safety.

The Ledbury Estate is situated at the top of Commercial Way and comprises low rise blocks and four tower blocks. The tower blocks, Bromyard, Peterchurch, Skenfrith and Sarnsfield are 14 storeys high, and each block consists of 56 two bedroom flats comprising 224 properties in total.

The blocks are concrete frame construction, built by Taylor Woodrow between 1969 and 1970 and are former GLC properties which transferred to Southwark Council in 1982.

Following that meeting, the Strategic Director Housing and Modernisation, Gerri Scott, contacted the resident by email to arrange a visit by the Fire Safety team to inspect the cracks. In a series of emails between the SDHM and the resident, photographs of the cracks were provided, along with specific advice that the resident had personally sought from the LFB which suggested that there was a breach of fire safety compartmentation.

The Fire Safety team carried out an inspection of the resident's flat on 29 June 2017 when it became clear that the gaps were significant. This raised concerns about the structural integrity of the block, and the other three tower blocks as well as the fire safety of the residents.

A new fire risk assessment was carried out on 30 June 2017 and the LFB were informed. The LFB carried out their own assessment of the tower blocks on the same day which required the council to put in place a number of remedial measures, all of which were designed to ensure that residents could remain in their homes during the investigative surveys and the temporary repairs to seal the breaches in compartmentation. These included:

- Walking Wardens (one per two floors) hired from a private company to walk the floors during twelve hour shifts (two shifts per day). This is co-ordinated from Tenants and Resident Hall (Control Centre) by Southwark Council staff to ensure that the brief is complied with in full.
- Each block has one person designated to call 999 to inform the Control Centre of any potential issues. This person has overall control of the wardens in the block. The instruction to the Wardens is that in the event of a fire anywhere in the block they are to alert the residents and assist them to leave the block. There is no longer a 'stay put' strategy applied to the estate we are now working to a simultaneous evacuation strategy. In an emergency, priority will be given to those on the floor of a fire and initially those on the floors above the fire.
- Communication between all Wardens via radios and between the Control Centre and the Head Warden and between Head Wardens for each block.
- The maximum distance from a front entry door to the staircase is @six metres and there are four flats per floor.
- Ongoing work to seal any gaps between flats.

- Inspections to all fire doors to ensure they are thirty minutes fire resistant and have appropriate self closing devices. If there is any doubt regarding the validity of a 'notional' door it will be replaced.
- A 'zero tolerance' approach to all items in the common areas to include doormats and pot plants.
- All flats have an enhanced LD2 part 6 fire alarm system meaning we have coverage to all rooms in the flats except the bathrooms. All flats are being checked to ensure their fire alarm is in full working order.
- Initial inspections undertaken by a Senior Building Surveyor and our Senior Fire Surveyor indicate there are no potential breaches between the dwellings and the escape routes and that the escape routes are fully protected.
- This building has no cladded materials.
- An interim fire alarm system covering the common areas at every landing.

All of these measures were fully complied with and as long as they remain pending a permanent solution to the compartmentation issues, residents will not need to leave their homes.

A team of technical staff started to assess all of the flats within the four tower blocks from Thursday 29 June. Contractors were appointed to carry out remedial works and continued to do so over the weekend and into the following week.

Arup, the leading civil engineering firm, were commissioned on Friday 30 June and started work on Monday 3 July. They carried out internal investigations to 4 flats, three occupied and one empty, and also erected a tower scaffold to the exterior of the building to inspect the structure externally.

Arup wrote to Dave Markham, Director of Asset Management, on 5 July 2017 to advise that, *'Arup engineers have found no structural safety issues but are continuing to investigate and will make recommendations for remediation work if required'*.

The LFB Borough Commander wrote to residents of the four tower blocks on 5 July 2017 to advise them of the ongoing dialogue between the council and the LFB and the appropriateness of the council's measures in view of the compartmentation measures as below:

*'Southwark Council then took the precaution of placing fire wardens on each floor of each of the blocks and briefed them to evacuate the entire block should a fire occur. Needless to say this is contrary to the LFB policy of 'stay put' but entirely appropriate if there are doubts regarding the compartmentation of a building.*

*In addition to the implementation of briefed fire wardens a range of other measures have been actioned that add to your safety in regard to early detection of fire, keeping means of escape clear and protected and evacuation protocols. Arrangements are being made to secure long term solutions and rest assured that the enhanced measures currently in place on the Ledbury Estate, will not be lifted until these solutions are satisfactorily actioned'.*

Communications to residents have been ongoing. A control centre has been set up in the Ledbury estate TRA Hall. This hall has been constantly staffed by council staff since Friday 30 June. It also provides rest centre facilities for the fire marshals and contractors who have been working on site.



The SDHM has sent letters all residents of the four tower blocks on Friday 30 June, Saturday 1 July, Monday 3 July and Wednesday 5 July. These have been hand delivered to residents, together with the letter from the LFB and update from Arup.

A dedicated website [www.southwark.gov.uk/ledburytowers](http://www.southwark.gov.uk/ledburytowers) has been set up where all information has been posted. Copies of FRAs are available on this website, although these are live documents because of the current compartmentation issues and are being constantly updated.

Ward councillors and the Chair of Ledbury TRA have received regular updates.

Arup engineers will be providing an overview presentation about the structural issues and answer residents' questions at the Ledbury Estate TRA AGM on Tuesday 11<sup>th</sup> July 2017, and the venue has been shifted to Camelot School to provide sufficient capacity for attendees.

The long-term solution for the tower blocks is to address the compartmentation issues.

The current remedial works being carried out are temporary measures to provide compartmentalisation.

Arup's report will provide conclusions on the nature of the structural movement and its extent and any remedial works. At the time of writing we have not yet received this. However we anticipate that from this information we will work with independent specialist consultants to develop a system to seal the cracking ensuring that it is flexible enough to maintain compartmentalisation to meet the necessary tolerances which we see with this type of construction.

Once a design solution is agreed these works will be commissioned and started immediately.

**Rt Hon Sajid Javid MP**  
**Secretary of State for Communities and**  
**Local Government**  
**2 Marsham Street**  
**London**  
**SW1P 4DF**

**Councillor Peter John, OBE**  
**Leader of the Council**  
 Labour Member for South Camberwell Ward  
 Cabinet Suite, Chief Executive's Department

peter.john@southwark.gov.uk

Tel: 020 7525 7158

**7<sup>th</sup> July, 2017**

**Ref: Cllr PJ/H8639/ag**

Dear Secretary of State,

The fire at Grenfell Tower has been an unimaginable tragedy and of course it brings back difficult memories for Southwark, where we have learned many lessons from the tragic fire at Lakanal in 2009, which killed six people. It is essential that the Government takes urgent action to investigate and respond to the causes of the Grenfell fire through a robust and thorough inquiry, working with local authorities to identify and take immediate action on any buildings at risk. Central government must also provide assurance that councils will be properly resourced to carry out necessary fire safety works identified in the wake of the Grenfell fire.

Southwark Council has taken extensive action to improve fire safety in our tower blocks. Since 2009 we have spent £62 million on our fire risk assessment programme and associated fire safety works, for all council housing in the borough. In response to Grenfell the council carried out an immediate review of cladding and related installation on council properties, confirming that none of the 174 tower blocks in the borough have combustible cladding. We are taking nothing for granted and the council is now carrying out a full further fire assessment of all tower blocks in the borough. We have also appointed national fire safety expert, Ben Bradford, and his specialist firm of consulting engineers, to carry out an independent review of the council's fire strategy and fire risk assessments. As well as taking these actions in our own borough, Southwark has played a key role in managing the response to the Grenfell fire. The council has been supporting colleagues at Kensington and Chelsea and our Chief Executive Eleanor Kelly is jointly leading the central command centre with John Barradell, CEO of the City of London Corporation.

The tragedy of Grenfell means we must all look again to ensure that everything possible is being done at both a local and national level to ensure residents' safety. The fact that hundreds of buildings across the country have failed emergency fire safety checks is deeply concerning. This is a national emergency, which requires a national response backed by effective and appropriate action by local councils. Residents' safety and security is paramount and it is imperative that nothing stands in the way of understanding why this tragedy happened and what needs to be done to ensure it never happens again. In the wake of Lakanal the council learnt lessons and took extensive action to improve fire safety in our borough. The Government must do the same; acting on the coroner's recommendations to DCLG following the Lakanal inquests.

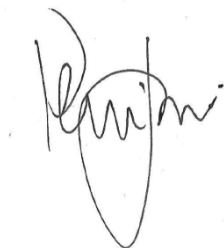
Alongside the public inquiry into Grenfell, we believe that government should develop a national fire safety strategy, which takes into account the voice and experience of local government. This should include a review of fire safety regulations to ensure they are fit for purpose, and to ensure that understanding and implementation of regulations is consistent across the country. Since the Lakanal fire Southwark Council has embedded fire safety in our policies and procedures at every level and the council has a team of 15 specialist fire safety officers. Central government should ensure that all local authorities have the necessary fire safety expertise to deal with this challenge. Government must also provide extra funding for local authorities to cover additional fire safety works, including provision for leaseholder properties, which cannot be met through the council's HRA.

It is essential that central government makes funding available for councils to carry out the fire safety measures required in the wake of Grenfell. Fire safety is a national issue and the financial burden for these works must not fall on already stretched council budgets. Like many councils Southwark is investing in high quality housing for our residents, but this work will be jeopardised if government fails to properly resource councils to deal with this national emergency. Councils should not be forced to choose between the safety of our residents and the quality of their homes. Instead, the Government should raise the borrowing cap for local authorities and guarantee national funding for additional fire safety works.

Southwark has a responsibility to all its residents, not just those living in our council blocks. While we will take full ownership of fire safety in our properties, we would ask that government provides reassurance and advice to councils regarding the status of other buildings within their boroughs, as it is clear the repercussions of Grenfell will extend much wider than council tower blocks.

Local government has been at the forefront of dealing with crises in recent weeks and months. Staff have gone above and beyond in responding to emergencies, including the London Bridge attack in our own borough. At Grenfell, where the initial response was far from adequate, other local authorities have stepped up and are now leading the response. In the wake of this national tragedy central government must now provide urgent reassurance to local authorities that it will properly resource councils to take the necessary steps to ensure residents' safety, as part of coherent national strategy for fire safety. Central government must use every tool at its disposal, including the coroner's recommendations from the Lakanal inquests and whatever learning comes from Grenfell, to ensure that a tragedy on this scale never happens again.

Yours sincerely,



**Councillor Peter John, OBE  
LEADER OF THE COUNCIL**



**Councillor Stephanie Cryan  
CABINET MEMBER FOR HOUSING**



**Report To:** Southwark Council

**Title:** Assessment of the Ignitability of Cladding  
Panels

**Ref:** 6453919

*Move Forward with Confidence*



**BUREAU  
VERITAS**



## Document Control Sheet

Identification	
<b>Client</b>	Southwark Council
<b>Document Title</b>	Assessment of the Ignitability of Cladding Panels
<b>Client Reference</b>	6453919
<b>Bureau Veritas Report Number</b>	15179

Contact Details		
<b>Company Name</b>	Bureau Veritas UK Limited	Southwark Council
<b>Contact Name</b>	Alastair Pert	David Rowson
<b>Position</b>	Consultant	Fire Safety Team Manager
<b>Address</b>	46-50 Verney Road London SE16 3DH	3rd Floor Hub 4 PO Box 64529 London SE1P 5LX
<b>Telephone</b>	0207 593 0173	020 7525 7472
<b>e-mail</b>	alastair.pert@uk.bureauveritas.com	david.rowson@southwark.gov.uk
<b>Websites</b>	www.bureauveritas.co.uk	www.southwark.gov.uk

Configuration				
Version	Date	Author	Reason for Issue/Summary of Changes	Status
v.1	07/07/2017	Alastair Pert		

	Name	Job Title	Signature
<b>Prepared by</b>	Alastair Pert	Consultant (Fire Science)	
<b>Approved by</b>	Stephen Day	Technical Director (Fire Science)	

Commercial In Confidence

© Bureau Veritas UK Limited

The copyright in this work is vested in Bureau Veritas UK Limited, and the information contained herein is confidential. This work, either in whole or in part, may not be reproduced or disclosed to others or used for any purpose, other than for internal client evaluation, without Bureau Veritas' prior written approval.

Bureau Veritas UK Limited, Registered in England & Wales, Company Number: 01758622  
Registered Office: Suite 308, Fort Dunlop, Fort Parkway, Birmingham, B24 9FD



## Table of Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>Methodology</b>	<b>3</b>
2.1	Laboratory Testing	3
<b>3</b>	<b>Results</b>	<b>5</b>
3.1	BS EN ISO 1182:2010 Reaction to fire tests for products – Non-combustibility test	5
3.2	BS EN ISO 11925-2:2010 Reaction to fire tests – Ignitability of products subjected to direct impingement of flame – Part 2: Single-flame source test	6
3.3	Beilstein Test	11
3.4	Ignitability of foam	11
<b>4</b>	<b>Discussion</b>	<b>12</b>
<b>5</b>	<b>Conclusions &amp; Recommendations</b>	<b>13</b>
	<b>Appendix 1 – Photographs</b>	<b>14</b>

## 1 Introduction

- 1.1 This report refers to a request from Mr David Rowson to assess the ignitability of a two types of cladding panel removed from two properties operated by Southwark Council: Canute Gardens and Medina House.
- 1.2 The purpose of the testing was to assess the burning behaviour of the panels, taking into account various scenarios as might be anticipated during a building fire. The panels are used in the open air and as a consequence will be exposed to natural weathering.
- 1.3 For external cladding panels, *Approved Document B (Volume 2 – Buildings other than dwellinghouses)* recommends that they be materials of limited combustibility.
- 1.4 The panelling from Medina House is understood to comprise a laminated structure, with facings of stainless steel (approximately 1-2 mm thick) painted on its top surface, plastic edge seals, and inherently flame-retardant extruded polystyrene foam insulation.
- 1.5 The panelling from Canute Gardens is understood to comprise a solid board of unknown composition, approximately 9 mm thick.
- 1.6 The fire safety design strategy for the respective buildings should be taken into account when finally deciding on the appropriateness of the cladding. This report does not include reference to the fire safety design strategy.
- 1.7 Proposed indicative tests were carried out at Bureau Veritas laboratories. Observations from these tests are summarised herein.
- 1.8 Testing was carried out between 30 June – 6 July 2017 by Alastair Pert.
- 1.9 Digital photographs are shown in the appendices.

## 2 Methodology

### 2.1 Laboratory Testing

- 2.1.1 Two laboratory scale tests were proposed. These were informed by *BS EN ISO 1182:2010 (Reaction to fire tests for products – Non-combustibility test)* and *BS EN ISO 11925-2:2010 (Reaction to fire tests – Ignitability of products subjected to direct impingement of flame, Part 2: Single-flame source test)*. Both tests are cited in *Approved Document B (Volume 2 – Buildings other than dwellinghouses)*, with the former forming part of the testing criteria for cladding, and the latter a general test for products. Due to the indicative nature of the testing, it was not deemed necessary to follow the British Standard methods in their entirety, rather the principle sections and criteria. The respective tests are described in more detail below, as well as details of additional testing that was performed.
- 2.1.2 Testing was carried out using samples from supplied sections of cladding. Samples were cut from the steel faced panels using hand tools only to avoid damaging the foam inner through friction.
- 2.1.3 Samples were conditioned for at least 24 hours prior to testing in a sealed cabinet at 24°C and 62% humidity.
- 2.1.4 *BS EN ISO 1182:2010 Reaction to fire tests for products – Non-combustibility test:* This simulates the effects of thermal irradiance from a fully developed venting compartment fire. Under the testing protocol, samples are exposed to a hot furnace environment. The furnace temperature was set to approximately 750°C and monitored throughout via a thermocouple placed approximately 7 cm inside the furnace. Cut sections of the samples were individually placed onto a heatproof steel mesh and placed inside the furnace at the approximate midway point, then monitored for 30 minutes. Observations were made for sustained ignition plus mass loss following testing. Sustained flaming ignition times should not exceed 20 seconds, and mass loss should not exceed 50%. The ignitability of volatile flammable gases produced by decomposition can also be assessed, and smoke production can be visually assessed. The test was repeated on five samples.
- 2.1.5 *BS EN ISO 11925-2:2010 Reaction to fire tests – Ignitability of products subjected to direct impingement of flame – Part 2: Single-flame source test.* The testing protocol used requires surface and bottom edge ignition, with a 30 second flame application time, testing in both “lengthwise” and “cross” directions, with a total test



duration of 60 seconds from the time of initial flame contact. The sample sizes are approximately 25 x 9 cm, full thickness, with three samples in each direction tested. Surface flaming should not exceed 15 cm above the point of initial contact, nor should there be any flaming droplets capable of spreading fire.

- 2.1.6 *Beilstein test*: This is a simple chemical test used as a qualitative test for halides. In this context, it can be used to demonstrate the presence of a halide-based flame-retardant within the foam inserts. A copper wire was cleaned and heated in a gas flame to form a coating of copper (II) oxide, exposed to the test material, and then reinserted into the flame. A positive result is indicated by a green flame.
- 2.1.7 *Ignitability of foam*: The foam insulation from the Medina House cladding panels was exposed to a gas flame, and the resultant burning observed. The time taken for flames to extinguish was measured, and observations made of smoke production, burning droplets, and propensity to spread fire.

### 3 Results

#### 3.1 BS EN ISO 1182:2010 Reaction to fire tests for products – Non-combustibility test

3.1.1 A summary of the samples and outcomes are shown in Table 1 and Table 2 for Medina House and Canute Gardens respectively.

Table 1: Summary of test – Medina House

Sample	Sample Dimensions (l x b x t)/ mm	Initial Mass/ g	Final Mass/ g	% Mass Loss	Flaming Ignition > 20s	Comments
Medina House 1	50 x 46 x 51	81.4	44.3	45.6	Yes	Corner piece. Ignition of foam within 3 seconds. Significant volumes of noxious black smoke produced.
Medina House 2	52 x 44 x 51	64.8	35.5	45.2	Yes	Edge piece. Ignition of foam within 2 seconds. Significant volumes of noxious black smoke produced.
Medina House 3	91 x 47 x 51	101.7	63.5	37.6	Yes	Long edge piece. Ignition of foam within 3 seconds. Significant volumes of noxious black smoke produced.
Medina House 4	44 x 52 x 51	65.7	36.1	45.0	Yes	Edge piece. Ignition of foam within 6 seconds. Significant volumes of noxious black smoke produced.
Medina House 5	100 x 45 x 51	96.1	61.2	36.3	Yes	Long edge piece. Ignition of foam within 3 seconds. Significant volumes of noxious black smoke produced.

3.1.2 The insulation foam, in all cases, ignited and continued burning for a period in excess of 20 seconds; therefore it is not considered compliant with the test criteria.

Table 2: Summary of test – Canute Gardens

Sample	Sample Dimensions (l x b x t)/ mm	Initial Mass/ g	Final Mass/ g	% Mass Loss	Flaming Ignition > 20s	Comments
Canute Gardens 1	51 x 43 x 9	31.9	25.2	21.1	No	No ignition occurred. No visible smoke produced.
Canute Gardens 2	52 x 44 x 9	32.5	25.7	20.9	No	No ignition occurred. No visible smoke produced.
Canute Gardens 3	50 x 46 x 9	33.4	26.3	21.4	No	No ignition occurred. No visible smoke produced.
Canute Gardens 4	51 x 43 x 9	32.4	25.4	21.5	No	No ignition occurred. No visible smoke produced.
Canute Gardens 5	49 x 43 x 9	30.5	24.2	20.9	No	No ignition occurred. No visible smoke produced.

3.1.3 The insulation foam, in all cases, did not ignite for the duration of testing; therefore it is considered compliant with the test criteria.

## **3.2 BS EN ISO 11925-2:2010 Reaction to fire tests – Ignitability of products subjected to direct impingement of flame – Part 2: Single-flame source test**

3.2.1 A summary of the test conditions is shown in Table 3, with the results for the respective tests shown in Tables 4a&b for Medina House, and Tables 5a&b for Canute Gardens respectively. The test was carried out on cut sections of the full thickness of the assembly.

3.2.2 The cladding panels from both Medina House and Canute Gardens were considered compliant with the test criteria.

3.2.3 A block of the foam on its own was subjected to testing, to assess the unprotected response. The material did not ignite or produce burning droplets, and would be considered compliant with the test criteria.

Table 3: Summary of test conditions

<b>Fuel source</b>	Laboratory grade propane
<b>Flame application time</b>	30 seconds
<b>Total test duration</b>	60 seconds
<b>Burner horizontal distance (surface ignition)</b>	0.5 cm
<b>Burner horizontal distance (bottom edge ignition)</b>	1.6 cm

Table 4a: Summary of test – Medina House – Surface Ignition

<b>Sample</b>	<b>Duration of Flaming/ s</b>	<b>Max. Extent of Flame/ cm</b>	<b>Flaming Reaches an Edge</b>	<b>Flaming Debris</b>	<b>Comments</b>
Medina House L1	0	1.5	No	No	No ignition of foam. Some light grey smoke produced. Minimal surface damage.
Medina House L2	0	1.4	No	No	No ignition of foam. Some light grey smoke produced. Minimal surface damage.
Medina House L3	0	1.5	No	No	No ignition of foam. Some light grey smoke produced. Minimal surface damage.
Medina House C1	0	1.2	No	No	No ignition of foam. Some light grey smoke produced. Minimal surface damage.
Medina House C2	0	1.3	No	No	No ignition of foam. Some light grey smoke produced. Minimal surface damage.
Medina House C3	0	1.4	No	No	No ignition of foam. Some light grey smoke produced. Minimal surface damage.
Insulating foam block	0	2.6	No	No	No ignition of foam. Some light grey smoke produced. Foam shrank away from the heat source in a vertical plane.

Table 4b: Summary of test – Medina House – Bottom Edge Ignition

Sample	Duration of Flaming/ s	Max. Extent of Flame/ cm	Flaming Reaches an Edge	Flaming Debris	Comments
Medina House L1	0	1.1	No	No	No ignition of foam. Some light grey smoke produced. Glowing of plastic edging observed, but no ignition. Minimal surface damage.
Medina House L2	0	1.0	No	No	No ignition of foam. Some light grey smoke produced. Glowing of plastic edging observed, but no ignition. Minimal surface damage.
Medina House L3	0	0.7	No	No	No ignition of foam. Some light grey smoke produced. Glowing of plastic edging observed, but no ignition. Minimal surface damage.
Medina House C1	0	0.8	No	No	No ignition of foam. Some light grey smoke produced. Glowing of plastic edging observed, but no ignition. Minimal surface damage.
Medina House C2	0	0.7	No	No	No ignition of foam. Some light grey smoke produced. Glowing of plastic edging observed, but no ignition. Minimal surface damage.
Medina House C2	0	0.6	No	No	No ignition of foam. Some light grey smoke produced. Glowing of plastic edging observed, but no ignition. Minimal surface damage.

Table 5a: Summary of test – Canute Gardens – Surface Ignition

Sample	Duration of Flaming/ s	Max. Extent of Flame/ cm	Flaming Reaches an Edge	Flaming Debris	Comments
Canute Gardens L1	0	1.4	No	No	No ignition occurred. No visible smoke produced.
Canute Gardens L2	0	1.3	No	No	No ignition occurred. No visible smoke produced.
Canute Gardens L3	0	1.2	No	No	No ignition occurred. No visible smoke produced.
Canute Gardens C1	0	1.3	No	No	No ignition occurred. No visible smoke produced.
Canute Gardens C2	0	1.4	No	No	No ignition occurred. No visible smoke produced.
Canute Gardens C3	0	1.5	No	No	No ignition occurred. No visible smoke produced.

Table 5b: Summary of test – Canute Gardens – Bottom Edge Ignition

<b>Sample</b>	<b>Duration of Flaming/ s</b>	<b>Max. Extent of Flame/ cm</b>	<b>Flaming Reaches an Edge</b>	<b>Flaming Debris</b>	<b>Comments</b>
Canute Gardens L1	0	1.2	No	No	No ignition occurred. No visible smoke produced. Minimal surface damage.
Canute Gardens L2	0	1.3	No	No	No ignition occurred. No visible smoke produced. Minimal surface damage.
Canute Gardens L3	0	1.0	No	No	No ignition occurred. No visible smoke produced. Minimal surface damage.
Canute Gardens C1	0	1.6	No	No	No ignition occurred. No visible smoke produced. Minimal surface damage.
Canute Gardens C2	0	1.6	No	No	No ignition occurred. No visible smoke produced. Minimal surface damage.
Canute Gardens C3	0	1.0	No	No	No ignition occurred. No visible smoke produced. Minimal surface damage.

### 3.3 Beilstein Test

2.2.1 The flame test was repeated three times on samples of the insulation foam and plastic edging from the Medina House cladding panels, with the outcome summarised in Table 6.

Table 6: Outcome of Beilstein test.

Test	Result	Conclusion
Foam 1	Positive	The insulation foam contains fire retardant
Foam 2	Positive	
Foam 3	Positive	
Plastic edging 1	Positive	The plastic edging contains fire retardant
Plastic edging 2	Positive	
Plastic edging 3	Positive	

### 3.4 Ignitability of foam

2.3.1 A 5 cm x 2 cm sample of foam was fixed in a horizontal orientation and a blowtorch applied for 5 seconds, then the sample observed for sustained burning, smoke production and burning droplets (*Table 7*). Burning droplets were considered to be those that ignited a piece of filter paper placed beneath the sample.

Table 7: Ignition of foam

Test Iteration	Sustained burning on removal of flame	Self-extinguished	Burning drips produced	Black smoke produced
1	<1s	Yes	No	Yes
2	<1s	Yes	No	Yes
3	<1s	Yes	No	Yes

2.3.2 The foam was observed to retreat from the flame, and any sustained burning tended to rapidly self-extinguish. Molten droplets and black smoke were observed in most cases during application of the flame. Whilst some of those droplets were initially flaming, they tended to rapidly self-extinguish without igniting the paper below.



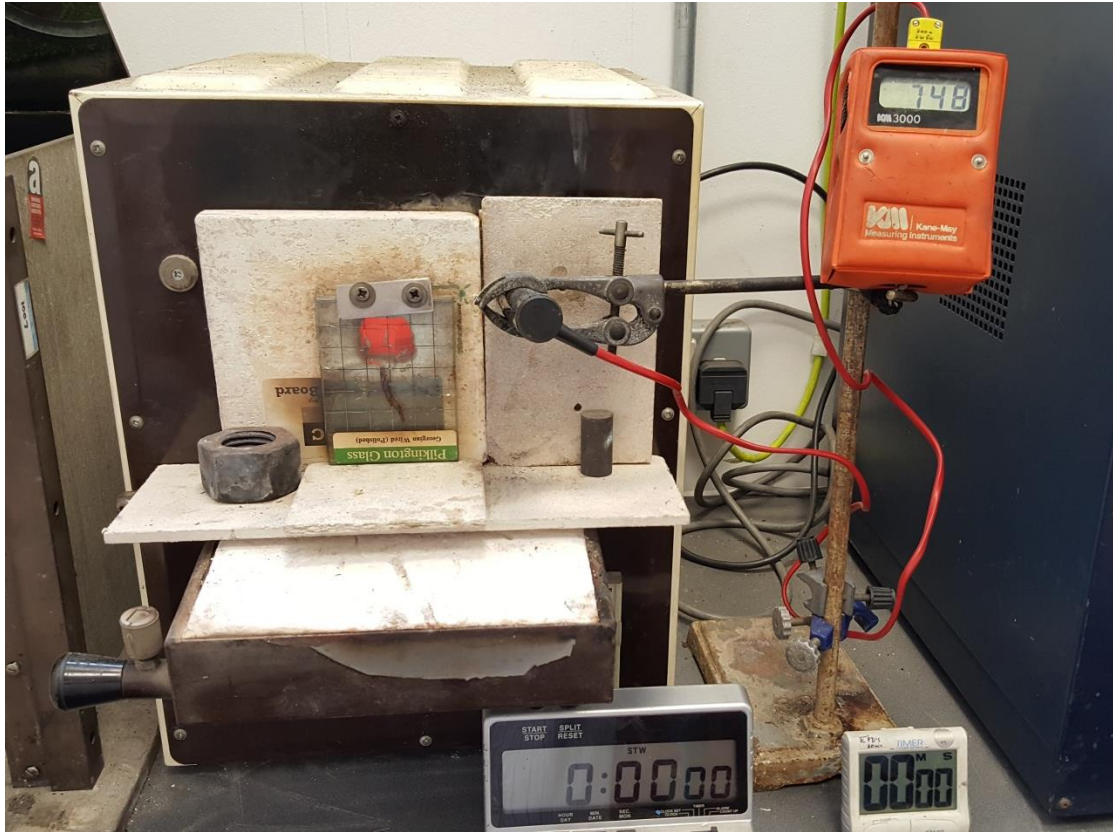
## 4 Discussion

- 3.1 The tests carried out in this project indicated that the cladding panels from Canute Gardens were unlikely to ignite and sustain spread of burning under most normal fire scenarios that might be expected given the context of its use; even when subjected to intense heat flux, ignition did not occur, and there was no significant production of smoke.
- 3.2 The tests carried out in this project indicated that the cladding panels from Medina House had the potential to ignite and sustain spread of burning under intense fire situations that might be expected to occur from a fully developed compartment fire venting through a window. Nevertheless, the insulation foam itself was flame retardant and under lower intensity fire conditions is considered unlikely to burn, particularly if it remained sealed within the steel panels.
- 3.3 The foam insulation of the Medina House cladding was formed from extruded polystyrene, which is inherently flame retarding *i.e.* it will not sustain burning under normal fire conditions. Under repeated testing with a single flame source, it was observed to self-extinguish. Nevertheless, under conditions of intense heat flux, it was capable of acting as a fuel and generating significant quantities of noxious, combustible black smoke.
- 3.4 With consideration to the results of the testing, the cladding from Canute Gardens demonstrated qualities in line with it being a material of limited combustibility, and would most likely be suitable for use.
- 3.5 With consideration to the results of the testing, the cladding from Medina House might not qualify as being a material of limited combustibility, and hence would not be considered suitable for use. However, this should be confirmed by further testing.

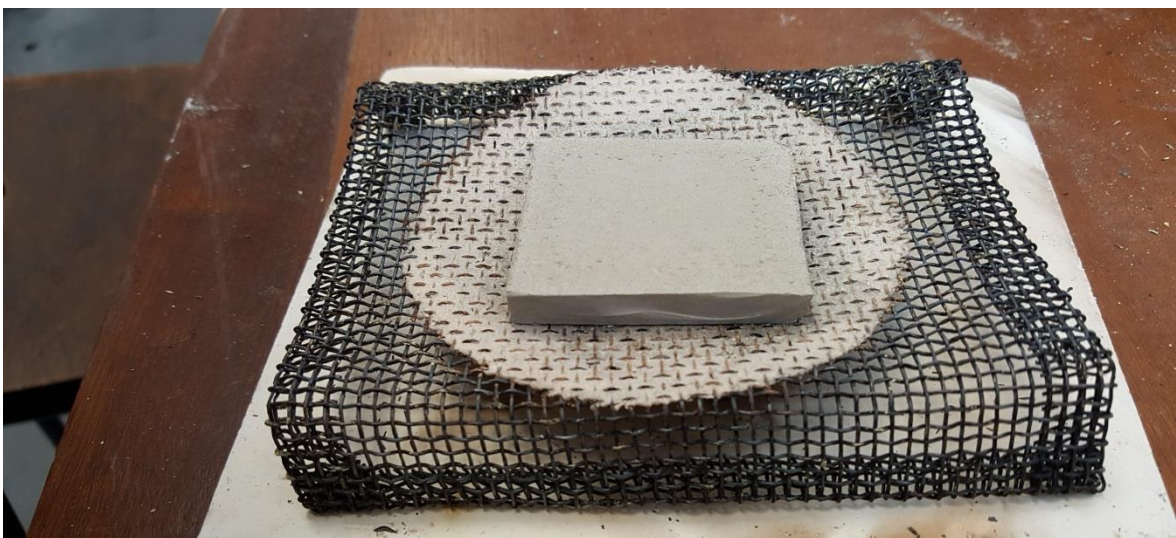
## 5 Conclusions & Recommendations

- ❑ The cladding panel from Canute Gardens did not ignite or spread flame under both applied single-flame source and intense radiant heat conditions.
- ❑ The cladding panel from Medina House did not ignite or spread flame under applied single-flame source, but rapidly did so under conditions of intense radiant heat.
- ❑ The insulation foam from the Medina House cladding ignited when directly exposed to a flame, but rapidly self-extinguished once the flame source was removed. It did not ignite when contained within the panel and the panel was exposed to a single-flame heat source.
- ❑ The cladding from Canute Gardens would most likely be considered compliant with the “*material of limited combustibility*” requirements of Approved Document B for external cladding.
- ❑ The cladding from Medina House might not be considered compliant with the “*material of limited combustibility*” requirements of Approved Document B for external cladding, and should undergo further testing.

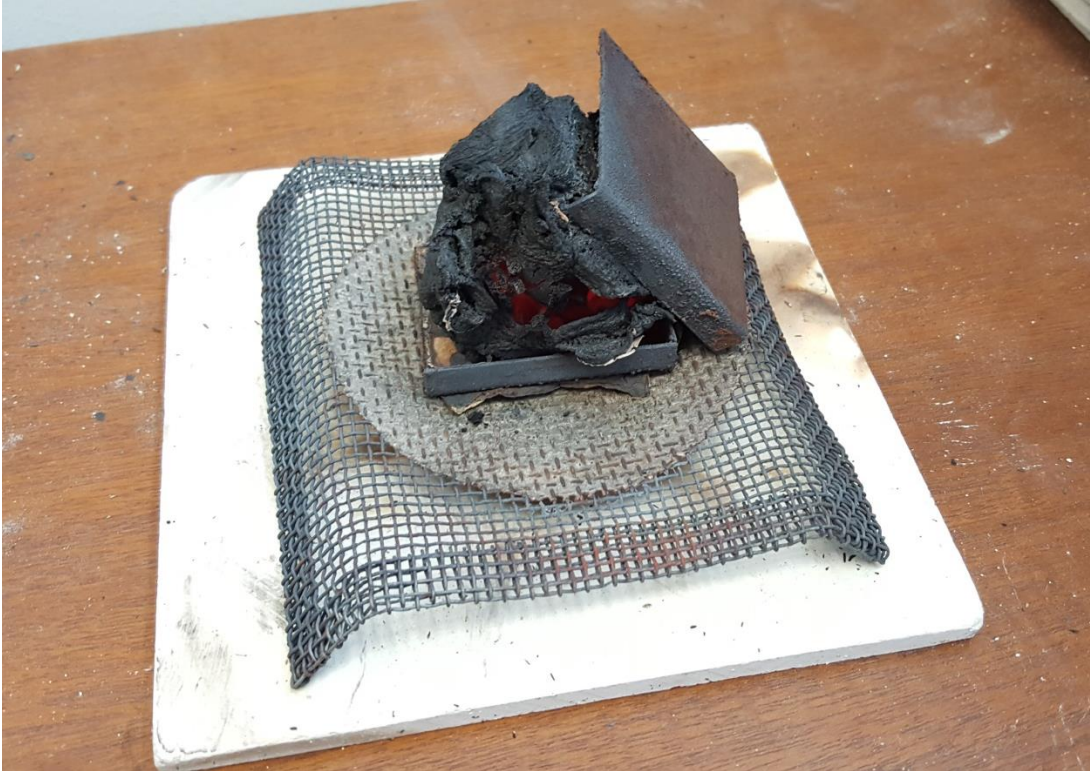
## Appendix 1 – Photographs



**Photograph 1:** Experimental arrangement for non-combustibility test



**Photograph 2:** Sample from Canute Garden cladding following non-combustibility test.



**Photograph 3:** Sample from Medina House cladding following non-combustibility test.





**Photograph 4:** Sample from Canute Garden cladding following single-flame source surface ignition test.



**Photograph 5:** Sample from Canute Garden cladding following single-flame source bottom edge ignition test.



**Photograph 6:** Sample from Medina House cladding following single-flame source surface ignition test.



**Photograph 7:** Sample from Medina House cladding following single-flame source bottom edge ignition test.





**Photograph 8:** Sample of the insulating foam from the Medina House cladding panels subjected to single-flame source surface ignition test.

<b>Item No.</b> 6	<b>Classification:</b> Open	<b>Date:</b> 13 July 2017	<b>Meeting Name:</b> Overview & Scrutiny Committee
<b>Report title:</b>		Establishment of a statutory joint health scrutiny committee to consider South London & Maudsley NHS Trust proposal to change the configuration of mental health acute beds for older adults	
<b>Ward(s) or groups affected:</b>		All	
<b>From:</b>		Head of Overview & Scrutiny	

## 1. RECOMMENDATIONS

1.1 That Southwark enters into a joint committee arrangement with Croydon, Lambeth, and Lewisham Councils to consider proposals from the South London and Maudsley NHS Foundation Trust

1.2 That the terms of reference of the joint committee are to scrutinize the proposals and to adopt procedure rules appropriate for this purpose

1.3 That Overview & Scrutiny Committee agrees to appoint Southwark members to the joint committee

1.4 That Overview & Scrutiny Committee agrees to appoint two Labour members in accordance with the rules relating to political proportionality

1.5 That the chair of the Healthy Communities Scrutiny Sub-Committee reports back to Overview & Scrutiny on the work of the joint committee

## 2. BACKGROUND INFORMATION

2.1 Any older patient requiring admission to an acute inpatient unit is currently admitted to one of the three units (AL 1 – on Maudsley Hospital site (Southwark), Hayworth at University Hospital Lewisham (Lewisham) or Chelsham on the Bethlem Royal site (Bromley). This is irrespective of their diagnosis, presentation and care needs. What this has led to is a mix of patients with different disorders and presentations on each of three wards, which can be distressing for patients (eg a patient with severe anxiety/depression may be distressed by being on a ward with people with severe dementia and agitation). Because admissions tend to be more than a week, and there is relatively slow turnover, compared with, say, an acute medical ward, this means that at any one time there are very few beds available, and patients needing an admission have to be admitted to the first available bed.

In order to improve patient outcomes and ensure most effective use of resources it is proposed that acute admission inpatient units will be configured to manage different patient groups - one focusing on dementia care and the other two on the care of people with psychotic, mood and anxiety disorders (the so-called “functional” disorders). This will enable ward environments to be tailored towards the specific

needs of the patients and staff will be able to specialise and become highly skilled in either dementia or functional illness care. The needs of people with dementia will rightly become an equal priority to that of functional illness.

To meet the needs of local people, the Trust will need one acute dementia unit, which it is proposed to be Chelsham House (Bethlem Royal Hospital site) and two units for people with functional disorders on AL1 (Maudsley Hospital) and Hayworth (University Hospital Lewisham). There are currently 54 beds in all across the 3 sites and the number will remain the same following the proposed changes.

### **3. KEY ISSUES FOR CONSIDERATION**

3.1 Southwark's constitution empowers Overview & Scrutiny Committee to enter into a joint committee and provide for the council's scrutiny function to be carried out by that joint committee. In this case, Lewisham and Lambeth members have taken the view that this proposal may constitute a substantial variation, and have asked Southwark to participate

### **4. Community impact statement**

4.1 The role of the joint committee is to examine the emerging proposals and scrutinize the consultation arrangements to ensure that all affected communities have the opportunity to participate

### **5. Resource implications**

5.1 All the boroughs involved have extremely tight resources for supporting scrutiny. It is not yet clear how many meetings will be required. It may be necessary to prioritise this over non-statutory scrutiny work. We will negotiate sharing the workload with all the boroughs involved

### **6. Consultation**

6.1 This report is only concerned with establishing the constitutional and administrative arrangements for the joint committee. No consultation has taken place on these matters.

### **7. Reasons for lateness and urgency**

7.1 The draft terms of reference for this joint committee have been repared and circulated to all 4 boroughs after the OSC agenda was published. The committee may need to meet in early September to.

## **SUPPLEMENTARY ADVICE FROM OTHER OFFICERS**

### **8. BACKGROUND DOCUMENTS**

<b>Background Papers</b>	<b>Held At</b>	<b>Contact</b>
None		

## 9. AUDIT TRAIL

*This section must be included in all reports.*

<b>Lead Officer</b>	Shelley Burke	
	Shelley Burke	
<b>Version</b>	Final	
<b>Dated</b>	11 July 2017	
<b>Key Decision?</b>	No	
<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	no	no
Strategic Director of Finance and Corporate Services	No	No
List other officers here		
<b>Cabinet Member</b>	No	No
<b>Date final report sent to Constitutional Team/Community Council/Scrutiny Team</b>	11 July 2017	

## **Joint Health Overview and Scrutiny Committee: SLaM Mental Health of Older Adults**

### **Terms of Reference**

The Joint Health Overview and Scrutiny Committee (JHOSC) is constituted in accordance with the Local Authority (Public Health, Health and Wellbeing Boards and Health Scrutiny) Regulations 2013 (the Regulations) and Department of Health guidance to respond to a substantial reconfiguration proposal covering more than one council.

The JHOSC will scrutinise the proposal from South London and Maudsley NHS Trust to change to the service model for acute inpatient care for older adults in Lambeth, Southwark, Lewisham and Croydon by designating separate inpatient wards for patients with functional (psychotic, mood and anxiety disorders) and organic (dementia) mental health needs.

The relevant commissioners for the proposal are Lambeth, Southwark, Lewisham and Croydon CCGs (Clinical Commissioning Groups) and the social care commissioners from all four boroughs.

### **Context**

Currently, patients over the age of 65 who are acutely unwell and require inpatient admission are admitted to the first available bed at one of three wards: Aubrey Lewis 1 at the Maudsley Hospital (Southwark); Hayworth at the Ladywell Unit (Lewisham); or Chelsham House at Bethlem Royal Hospital (Bromley).

SLaM proposes to change the current service model by allocating one ward for patients experiencing moderate to severe dementia (at Bethlem Royal Hospital) and two wards for the care of patients with functional mental health conditions (at Maudsley Hospital and the Ladywell Unit). All wards would, however, have multidisciplinary teams able to provide care and treatment for people whatever their diagnosis. Patient and carer preferences would also continue to be accommodated should someone prefer to be cared for on a particular ward.

The proposed service delivery model would be in line with national guidance and recommendations.

### **The JHOSC's terms of reference are:**

1. To undertake all the functions of a statutory JHOSC in accordance with the Regulations and Department of Health Guidance, with the exception of the power to make a report to the Secretary of State in relation to any proposals. By way of illustration, the JHOSC's functions include, but are not limited to, the following:
  - a) To consider and respond to substantial reconfiguration proposals, from any health provider, which affect Lambeth, Southwark, Lewisham and Croydon.
  - b) To scrutinise the commissioners of the proposal, seek assurance that the proposal is supported, and ensure that partnership arrangements between health and social care, and across the boroughs, are suitable.
  - c) To scrutinise any consultation process related to the proposal.

## **Membership**

Membership of the Joint Committee will be two named Members from each of the following local authorities:

- London Borough of Lambeth
- London Borough of Lewisham
- London Borough of Southwark
- London Borough of Croydon

Members must not be an Executive Member.

## **Procedures**

### **Chair and Vice-Chair**

1. The Joint Committee will appoint a Chair and Vice-Chair at its first meeting. The Chair and Vice-Chair should be members of different participating authorities.

### **Substitutions**

2. Substitutes may attend Joint Committee meetings in lieu of nominated members. Continuity of attendance throughout the review is strongly encouraged however.
3. It will be the responsibility of individual committee members and their local authorities to arrange substitutions and to ensure that the lead authority is informed of any changes prior to the meeting.
4. Where a substitute is attending the meeting, it will be the responsibility of the nominated member to brief them in advance of the meeting

### **Quorum**

5. The quorum of the meeting of the Joint Committee will be 3 members, each of whom should be from a different participating authority.

### **Voting**

6. It is hoped that the Joint Committee will be able to reach their decisions by consensus. However, in the event that a vote is required each member present will have one vote. In the event of there being an equality of votes, the Chair of the meeting will have the casting vote.
7. On completion of the scrutiny review by the Joint Committee, it shall produce a single final report, reflecting the views of all the local authorities involved.

### **Meetings**

8. Meetings of the Joint Committee will normally be held in public and will take place at venues within South London. The normal access to information provisions applying to meetings of the Overview and Scrutiny committees will apply. However, there may be occasions on which the Joint Committee may need to make visits outside of the formal Committee meeting setting.
9. Meetings shall last for up to two hours from the time the meeting is due to commence. The Joint Committee may resolve, by a simple majority, before the expiry of 2 hours from the start of the meeting to continue the meeting for a maximum further period of up to 30 minutes.

**Local Overview and Scrutiny Committees**

10. The Joint Committee will encourage its Members to inform their local overview and scrutiny committees of the work of the Joint Committee on the SLaM Mental Health of Older Adults proposal.
11. The Joint Committee will invite its Members to represent to the Joint Committee the views of their local overview and scrutiny committees on the SLaM Mental Health of Older Adults proposal and the Joint Committee's work.

**Communication**

12. The Joint Committee will establish clear lines of communication between itself, SLaM, CCGs, and local authorities. All formal correspondence between the Joint Committee, local authorities and the NHS on this matter will be administered by an officer or (*other*) until such officer is appointed.

**Representations**

13. The Joint Committee will identify and invite witnesses to address the committee, invite comments from interested parties and take into account information from all the local Healthwatch organisations. It may wish to undertake further consultation with a range of stakeholders.

**Support**

14. Administrative and research support will be provided by the scrutiny teams of the 4 boroughs working together.

**Assumptions**

15. The Joint Committee will be based on the following assumptions:
  - a) That the Joint Health Scrutiny Committee is constituted to respond to SLaM Mental Health of Older Adults proposal.
  - b) SLaM, and their commissioners, will permit the Joint Health Scrutiny Committee access to the outcome of any public consultation.

## **Draft OSC work programme**

### **Note:**

**OSC to discuss which cabinet members are interviewed at sub-committees and which at OSC**

### **13th July 2017 meeting**

Fire Safety

Agree Work Programme

### **Additional September 2017 meeting (date TBC)**

Budget savings monitoring

Regen item 1 (committee suggestions welcome)

Value for money from Cultural Strategy

Cabinet member interview

### **9th October 2017 meeting**

Interview with Brexit Officer

Youth Justice Scrutiny

Value for money from Cultural Strategy

Regen item 2

### **15 Nov 2017 2017 meeting**

Youth violence

Road Safety

Walworth Town Hall

Cabinet Member Interview

Youth Justice Scrutiny



**11<sup>th</sup> December 2017 meeting**

Budget savings monitoring

Cabinet Member Interview

Value for money from Cultural Strategy

Regen item 3

**Early Feb Budget Scrutiny (date TBC)**

Budget only

**13th March**

Revisit Fire Safety

TBC

TBC

TBC

