Dear Geraint

**Indoor air pollution: Health impacts and potential solutions**

Congratulations again on the APPG meeting on ‘Indoor air pollution’ that you chaired on Thursday 6 September.

I am writing on behalf of Clean Air in London (CAL) to follow up on my intervention during the discussion and our conversation afterwards.

1. Baroness Jones’ excellent Clean Air (Human Rights) Bill, introduced on 5 July 2018, includes specific proposals on indoor air quality in sections 2 and 3 and Schedule 2. These can be seen here:


   They are fully endorsed by CAL and our lead sponsor, Camfil (which is a world leader in air filters for buildings):

   https://cleanair.london/health/clean-air-is-a-human-right/


   As you know, Baroness Jones’ (‘top-down’) proposals for a new Clean Air Act are entirely complementary with your excellent Bill (with its more ‘bottom-up’ proposals). It would be marvellous if your two bills align proposals on indoor air e.g. by enshrining the right to clean air based on World Health Organisation guidelines for indoor air quality and the latest ISO standards.

   https://www.iso.org/home.html

2. The Knightsbridge Neighbourhood Plan, produced by the forum that I Chair, is heading to its referendum on 18 October. If adopted, that Plan would introduce a planning policy on indoor air quality that could be copied by other statutory planning bodies. The ‘Healthy Air’ policy includes:
Major development and must demonstrate that it is designed to ensure that
indoor air quality complies with the latest WHO guidelines for short and long
term air quality including particulate matter (PM$_{2.5}$ and PM$_{10}$), nitrogen dioxide
(NO$_2$), carbon monoxide (CO), formaldehyde and volatile organic compounds
(VOCs). Carbon dioxide (CO$_2$) concentrations in indoor air should also be
considered. Compliance with such standards is also encouraged on medium
development and substantial refurbishment schemes.

The policy also provides further information on pages 65 to 68 with paragraph 10.7 explaining:

Public health can be improved by requiring compliance with the best international standards for
indoor air quality since people typically spend about 90% of their time indoors. In doing so it is
important to understand the difference between mechanical ventilation, air conditioning and air
filtration. Appropriate standards for the selection of energy efficient air filters to demonstrate
compliance with design standards in Policy KBR34(D) include BS EN 16798-3:2017 (for minimum
air filtration efficiency), BS CEN ISO 16890-1:2016 (for particulate matter including PM$_{1}$) and BS
CEN ISO 10121-2:2013 (for gases). These standards can be applied to reduce energy use and CO$_2$
emissions. If air filtration is utilised in the development to comply with indoor air quality standards,
information must be provided to the tenant on the type of air filtration used, its location and how
to maintain it.

http://www.knightsbridgeforum.org/media/documents/knightsbridge_neighbourhood_plan_2108
18_website_version.pdf

See more at http://www.knightsbridgeforum.org.

3. While it was some relief to see Building Bulletin 101 (BB101) on indoor air quality in schools
published on 23 August 2018 after long delays, it is astonishing that it depends on two standards
for air filtration, BS EN13779 and BS 1779 that were withdrawn in February and June 2018
respectively i.e. BB101 was out-of-date before it was published! No review is proposed until 2022.

https://www.gov.uk/government/publications/building-bulletin-101-ventilation-for-school-
buildings

Please will you ask the Department of Education (DoE) or the Education and Skills Funding Agency
(which is sponsored by the DoE) to issue an immediate amendment or new revision to BB101 i.e.
published before the end of 2018. Children in schools can’t wait till 2022 or beyond for clean air.

4. Regrettably, the Department of Health (DoH) is even further out-of-date with its guidance on
heating and ventilation systems titled ‘Health Technical Memorandum 03-01: Specialised
ventilation for healthcare premises’ published in 2007. The guidance is in two parts: ‘Part A:
Design and validation’; and ‘Part B: Operational management and performance verification’. See:

https://www.gov.uk/government/publications/guidance-on-specialised-ventilation-for-healthcare-
premises-parts-a-and-b
An investigation by CAL in 2013 found that the guidance hadn’t even been updated to ensure compliance with the 2007 version of BS EN 13779. Worse, the DoH is still recommending the use in general areas in hospitals of G4 air filters (which are only appropriate in warehouses and workshops to remove ‘dust’ or as ‘pre-filters’) and advises that the use of high-efficiency particle (HEPA) filters should be kept to a minimum. This is unacceptable.

https://cleanair.london/indoor-air-quality/air-quality-in-hospitals-may-be-no-better-than-warehouses/

https://www.bmj.com/company/newsroom/most-of-londons-%E2%80%8Bnhs-facilities%E2%80%8B-exceed-legal-air-pollution-limits/

I would be very grateful if you would please urge the DoE to issue an immediate amendment to BB101 (i.e. before the end of 2018) and urge the DoH to update its guidance on indoor air quality during 2019 to require the latest ISO standards.

Please say if you’d like more information on any of the above. I have copied Baroness Jones and would be pleased if you would like to forward my letter to others e.g. Dr Sani Dimitroulopoulou, David Evans, Carla Jones, Dr Derek Crump or the DoE and DoH.

As always, thank you for your commitment to clean air.

Yours sincerely

Simon Birkett
Founder and Director

cc: Baroness Jones