

## **Open letter**

Sadiq Khan  
Mayor of London  
Chairman of Transport for London  
City Hall  
Queen's Walk  
London SE1 2AA

By email: [mayor@london.gov.uk](mailto:mayor@london.gov.uk)

9 July 2017

Dear Sadiq

### **Air pollution in the London Underground ('tube dust'): expert health advice; warnings; and action**

I am writing on behalf of Clean Air in London (CAL) about air pollution in the London Underground ('tube dust' and 'Tube') to urge you to do much more, much faster to: understand the health risks (adopting a precautionary approach); warn passengers and potential passengers (with immediate, preliminary warnings); and reduce people's exposure to it.

CAL welcomes your fresh approach to dealing with air pollution in the Tube announced on 23 June 2017, to the limited extent it goes:

<https://tfl.gov.uk/info-for/media/press-releases/2017/june/mayor-launches-plan-to-improve-air-quality-on-the-tube>

However, CAL was troubled to find subsequently that the independent advice and support mentioned in TfL's media release was initially sought from the Committee on the Medical Effects of Air Pollution (COMEAP) on 23 May 2016, not now, in the form that CAL explicitly rejected in an unsatisfying dialogue with Transport for London (TfL) over many months. That dialogue came after many years of CAL trying to get TfL and the previous Mayor to take air pollution seriously in the Tube. CAL understands that, with limited resources, COMEAP met finally on 7 June this year and discussed a 'literature search' being undertaken which is being taken forward with TfL.

Last Monday (3 July), Lord Borwick (copied) asked the Minister, Lord Gardiner of Kimble, at the start of a two hour debate in the House of Lords:

*"Will he ask the Committee on the Medical Effects of Air Pollutants [COMEAP] about the potential dangers of air pollution in the London Underground, who should be warned and what else should be done about it? I know the mayor has started to look into this issue but more work needs to be done."*

Then today (9 July), an exclusive investigation by Jonathan Leake of the Sunday Times (copied), quoted Professor Stephen Holgate of the British Lung Foundation, an eminent scientist and former Chairman of COMEAP (1992-2001), as saying, in the context of the investigation:

*“The particles in underground railways are rich in iron and other metals such as copper, chromium, manganese and zinc. Metal particles increase our risk of asthma, lung and cardiovascular disease and possibly dementia.”*

This statement is the starkest indication yet from an eminent scientist of the likely dangers of air pollution in the Tube and the need for much more action, much sooner by you as Mayor. It compounds recent warnings and research from Professor Prashant Kumar, another eminent scientist.

Worse, CAL considers that TfL’s response quoted in the Sunday Times article was misleading, disingenuous or worse. For example:

- ‘health and safety’ standards relevant for TfL staff should not be the benchmark for population wide exposures to ‘tube dust’;
- the ‘health and safety’ standards mentioned were rejected many years ago by leading experts including IOM and the TUC as being insufficient;
- judging dangers or exposures relative to other air pollution exposures (such as diesel vehicles which emit carcinogenic fumes) rather than as absolute risks to public health is ridiculous; and
- what does TfL mean when it says: “We have a new air quality programme to ensure particles are kept to a minimum?” By what measure(s) does TfL judge ‘minimum’ e.g. cost, convenience or the lowest level technically achievable?

**As CAL understands it, scientists have found no safe level for exposure to airborne particulate matter. Indeed, CAL’s understanding is that exposure to ‘dust’ can adversely affect health and it is important to keep dust concentrations as low as possible.**

Further, TfL’s previous protestations that tube dust is fundamentally different to (all) other forms of particulate matter because it is ‘heavier’ are nothing short of laughable. If anything, Professor Holgate’s statement today suggests we might be more concerned not less relative to other forms of particulate matter.

In CAL’s opinion, it is also wrong for TfL to say or imply, as it has in the past, that such pollution is ‘safe’ when it is around some guideline levels in some locations: it is a bit like saying it’s safe to drive at the speed limit (in some countries).

Please take the following steps immediately:

## 1. COMEAP advice

Ask COMEAP the three questions proposed by Lord Borwick (and offer it resources) namely:

- *What are the potential dangers of air pollution in the London Underground?;*
- *Who should be warned [and how and when]?; and*
- *What else should be done about it?*

## 2. Warn passengers and potential passengers on a precautionary basis

- Ask Professor Holgate or the British Lung Foundation for advice, on a preliminary, urgent and precautionary basis pending the above advice from COMEAP, about public health warnings that you would initiate immediately and proactively to warn some or all passengers and potential passengers about air pollution in the London Underground.

## 3. Take every technically feasible step in the short-term, medium-term and longer-term to reduce people's longest exposure to the highest air pollution in the Tube including:

- Platform barriers, like those on the Jubilee line, wherever technically feasible;
- Commercial air filters on platforms that would match or exceed BS EN 16798-3:2017 'Energy performance of buildings' which replaces BS EN 13779 on 25 July 2017. BS EN 16798-3:2017 uses ISO 16890 ePM<sub>1</sub> (for particulate matter) and ISO 10121 (for gases);
- Ensuring that Crossrail's air-conditioned trains include air filtration not just heating, cooling and ventilation. CAL understands they will have full-height platform doors; and

Please note that Camfil, a leader in air filter solutions, has been a sponsor of CAL's campaign to build public understanding of indoor air quality since 2011. CAL and Simon Birkett have no financial interest or incentive to promote the use of air filters.

Please ensure TfL's Board and Safety, Sustainability and HR Panel are involved fully in addressing the above issues.

CAL considers that your predecessor covered up the scale and dangers of air pollution in the London Underground and urges you therefore to go much further, much faster than you are currently proposing to address these serious problems.

I look forward to hearing from you.

Yours sincerely

Simon Birkett  
Founder and Director  
Clean Air in London

Cc:

Lord Borwick  
Jonathan Leake, Science and Environment Editor, Sunday Times  
London Assembly Environment Committee

Please see further references and links on this webpage

<https://cleanair.london/health/open-letter-to-mayor-khan-seeking-urgent-action-on-tube-dust/>