

# Subject: Tube Dust

Report to: Environment Committee

Report of: Executive Director of Secretariat

Date: 27 June 2019

This report will be considered in public

## 1. Summary

- 1.1 The Committee will discuss the impacts of tube dust on health, and reactive and preventative measures that could mitigate this, with expert guests, including representatives from Transport for London (TfL) and academics.
- 1.2 The meeting is expected to consider the composition and concentration levels of tube dust, the health risks associated with tube dust, and response to it.

## 2. Recommendations

- 2.1 **That the Committee notes the report as background to putting questions to invited guests on Tube dust and notes the subsequent discussion.**
- 2.2 **That the Committee delegates authority to the Chair, in consultation with party Group Lead Members, to agree any output arising from the discussion.**

## 3. Background

- 3.1 Tube dust has garnered significant attention over the last few years, in particular last year after the Committee on the Medical Effects of Air Pollutants (COMEAP) published a report on the health impacts of particulate matter found in the London Underground. Questions remain regarding the long-term effect of tube dust from an occupational and public health perspective, and the measures that can be taken to address it.

## 4. Issues for Consideration

### *Composition and concentration levels of tube dust*

- 4.1 The composition of dust varies in different parts of the network, due to differences between lines and stations on the system, likely depending on station design and rolling stock/braking characteristics. However, we know that generally, tube dust is composed of iron (90%), quartz/silica (1-2%), and organic content.

4.2 Monitoring reports have been released by TfL over the last two years, with the most recent report expected to have been released in May 2019. These reports look at differences in exposure levels according to lines and stations. Although TfL has not interpreted these as significant, this section will aim to raise questions about lessons learned from this variation in terms of design and maintenance of stations and tunnels.

#### *Health risks associated with Tube dust*

4.3 Several issues have been raised by Tube drivers in their complaints, including: a) several drivers suffering with respiratory problems; b) station staff and drivers having chest colds; c) notable levels of dirt when washing hands and face during and after a shift; and d) equipment failing due to high dust levels (this was specific to the London Bridge station). However, TfL has asserted that levels of particulate matter are well below statutory Workplace Exposure Limits.

4.4 Additionally, the air in the tunnels is partly isolated from the outdoor air, and so particulate matter produced there does not feature highly in sources for the city as a whole, but it is significant for the air quality on the system itself. In the confined environment of tunnels and stations, dust therefore tends not to disperse. With the London Underground handling up to 5 million passengers a day, many Londoners are exposed to this air.

4.5 This section will investigate the evidence on health risks and the impact tube dust can have depending on the level of exposure.

#### *Response to Tube dust*

4.6 At the meeting in January 2019 on air quality, TfL outlined several mechanisms used to clean the tunnels and respond to tube dust. This section would look at these mechanisms and their efficiency in more detail and investigate international best practice in responding to tube dust.

#### *Invited guests*

4.7 The Committee has invited expert guests to contribute to the discussion. Attendees may include:

- Peter McNaught, Director of Asset Operations, TfL;
- Rikard Moen, Head of Occupational Health, TfL;
- Dr Jenny Mindell, Professor, Department of Epidemiology and Public Health, University College London; and
- Cat Cray, RMT Stations Health and Safety Council Member.

## **5. Legal Implications**

5.1 The Committee has the power to do what is recommended in the report.

## **6. Financial Implications**

6.1 There is no financial implication to the Greater London Authority arising from this report.

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**List of appendices to this report:** None.

<b>Local Government (Access to Information) Act 1985</b>
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List of Background Papers:
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None
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