



Response of the Road Haulage Association to DEFRA & DfT

Call for evidence on brake, tyre and road surface wear

28 September 2018

Summary

1. DEFRA and DfT are calling for evidence on non-exhaust emissions, to review the estimates of their contribution to air pollution, to develop forecasts for how they will evolve in the future, and to identify concrete actions they might take to generate a step change in work in this area and understand the policies that might support that work. The evidence gathered will inform the government's final Clean Air Strategy, which will be published later this year
2. Abrasion of tyres and road paints produce micro-plastic particles, which enter rivers and lakes from road run-off and can eventually be deposited into the sea. Microplastics have with well-documented impacts for marine wildlife and the food chain, and studies estimate that emissions from tyre wear alone makeup 5-10% of microplastics deposited in the oceans

Background about the RHA

3. The RHA is the leading trade association representing road haulage and distribution companies, which operate HGVs as profit centres. Our 7,200 members, operating near to 250,000 HGVs, range from single-truck firms to those with thousands of vehicles. These companies provide essential services on which the people and businesses of the UK depend.
4. We proactively encourage a spirit of entrepreneurship, compliance, profitability, safety and social responsibility. We do so through a range of advice, representation and services, including training.
5. We would like to thank the DEFRA and DfT, for the consultation and the opportunity to comment on the issues raised.
6. In addition to answering the questions directly we have added further comments on related issues where we feel these are relevant.

Responses to the Questions

Q1. Do you have any quantitative evidence for the level of emissions which come from brake and tyre wear?

NO



Q2. Do you know of a better, more reliable way to calculate the emissions from brake and tyre wear?

NO

Q3. Do you have data of PM emissions from braking in electric or hybrid vehicles, and/or a comparison with brake emissions from conventionally fuelled vehicles?

No, but it is a common fact that heavier vehicles cause more PM and Electric vehicles are in the main heavier than conventional.

Q4. Do you have data on PM emissions from tyre wear of electric or hybrid vehicles, and/or a comparison with tyre wear emissions from conventionally fuelled vehicles?

NO

Q5. What might encourage drivers to buy a car which has “one pedal driving” technology fitted, and maximise regenerative braking?

In the Heavy vehicle sector this is a No Comment, however a level of training would be required for all employed HGV Drivers who are introduced to one pedal driving.

Q6. Do you have any suggestions for how PM emissions from brakes and tyres should be tested? Or how a suitable test method could be developed?

NO

Q7. Are you aware of any new or emerging technologies or materials which could reduce the emissions from brake and tyre wear?

NO

Q8. If so, what, if anything, could speed up the development and/or uptake of these technologies?

NO

Q9. Do you have evidence for the contribution of road abrasion to particulate emissions?

NO

Q10. Do you have evidence of how changes in road surface material influence the level of PM emissions from road traffic?

Traffic Calming road humps cause more braking than necessary increasing PM emissions. Not controlling congestion causes more braking. A lot of these instances occur near housing and schooling so also disturb road dust more than is normal.

Q11. Do you have evidence of the impact of ageing/deterioration of the road surface on PM emissions?

Road Maintenance is extremely poor, failure to repair potholes causes vehicles to damage tyres and causes vehicles to slow down and increase PM whilst doing so.

Q12. What other factors might influence the extent of PM emissions from road abrasion? Do you have any evidence of their effect?

No Comment

Q13. Do you have any evidence for the presence, extent and environmental impact of micro-plastic particles from these sources? We would also be interested to receive evidence of the pathways by which they reach the marine environment.

NO

Q14. Do you have any views on the options identified above for reducing non-exhaust PM emissions, or other suggestions of measures that could be taken to reduce non-exhaust PM emissions and their impact on air quality? Please justify your views.

PM's from vehicle fitted ancillary equipment such as Lorry mounted diesel operated refrigeration units have not been accounted for.

Q15. We know that the way in which a vehicle is driven (e.g., the degree of acceleration, braking and overall anticipation) and generally managed (e.g. avoiding carrying unnecessary weight) can affect the level of emissions. Do you have evidence of the impact of different driving styles or of the other options identified above or in your response to Q13 on emissions of PM from brake, tyre and road wear?

Use of traffic calming, means that vehicles have to use their brakes more often as does congestion. Dealing with both will cut PM emissions.

Q16. Are there any issues not covered in previous questions where you would like to provide evidence, such as on the health or environmental impacts of PM emissions from brake, tyre and road wear?

If you just changed every car from diesel and petrol to electric it wouldn't change congestion, or commute times or parking issues.

Regenerative braking will reduce some PM but most comes from disturbing particles already on the ground and from tyre and road wear, most EV's are heavier than normal cars due to battery weight and more weight means more PM, this will of course get better when technology reduces battery weight.

No account has been looked at from ancillary equipment fitted to vehicles or used in the construction industry.

Further Comments

It is apparent from the questions asked here that there is a need for much more research on this subject before detailed results are produced. Prior to implementing any restrictions on businesses the subject matter needs to be fully understood

The timeline given is inappropriate. The need for high quality, well evidenced research and understanding is critical.

A full understanding of the problem, the factors contributing to it and what (if anything) could or should be done is vital. That is impossible in the time given to this programme at the moment and we fear that poor quality information, poorly understood and misapplied will be the result (as we have seen with current Clean Air Zone policies that are based on inaccurate and misrepresented data).

28 September 2018
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