

6th June 2019

Alex Williams
Director of City Planning
Transport for London
City Planning
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Stratford
London E20 1JN

Dear Mr Williams,

Thank you for your response to my letters of 19 March and 26 April. I will waste no time in my response: there are many riders being unfairly charged £12.50 per day to enter the ULEZ and, as I am sure you would expect, your response fails to satisfy the Motorcycle Action Group.

You begin with highly generalised references to London's "toxic air" which you refer to as a "serious public health crisis". These are subjective statements; opinion. You then provide unrelated facts to create the impression that these opinions are actually facts. You make the statement that "thousands of Londoners die early each year because of toxic air pollution", going on to list effects of "stunting the growth of children's lungs", "a cause of cancer" and increasing "the risk of asthma, stroke and dementia". However, you fail to provide any context for these comments, thus creating the impression that air pollution and - in the specific context of ULEZ - road transport-generated NO₂ emissions are the main driver of all these problems. Clearly, without supporting data, this rhetoric is more toxic than the impact of the single pollutant that the ULEZ policy is designed to tackle. Is the need for this form of rhetoric to justify your statement that "hard-hitting measures are required to tackle London's air pollution crisis"? We would ask that you supply the direct evidence of the proven specific health impacts on Londoners so that context for your justification of this highly punitive ULEZ policy can be fairly assessed.

We have been able to find a more balanced view of the health impacts of air pollutants from those whom you would expect to have a significant stake in policies to promote cleaner air.

Cancer Research UK discuss the risks of air pollution on their website. Most of the discussion is with respect to Particulate Matter (PM), which is out of scope for the ULEZ policy, but clearly says "Compared to other countries around the world, the UK has fairly low levels of air pollution". For most pollutants it is within the EU limits. Because levels of PM_{2.5} are relatively low, the increased risk for an individual is fairly small. The exact risk depends on how much air pollution people are regularly exposed to. But it's hard to say exactly what the risk is for the people living in a certain area." Specifically on NO₂ they comment: "Another thing found in air pollution is nitrogen dioxide. The UK, and particularly cities, are in breach of EU commitments on nitrogen dioxide (NO₂) which we sometimes hear about in the news. But it isn't completely clear whether NO₂ could directly cause cancer."

Asthma UK on their website discuss air pollution. Under the heading "Pollution: what's the risk to people with asthma?" they discuss particulate matter, but make no mention of NO₂. Under the heading "How worried do you need to be?" they state: "Air pollution is a possible risk factor for everyone with asthma. But the good news is if your asthma is well managed and you rarely have symptoms you'll be much more able to cope with the effects." Under the heading "Can being exposed to pollution actually cause asthma?" they discuss air pollution in general, not NO₂, but again they state "There's some evidence that air pollution plays a part in causing asthma. More research needs to be done"

The British Lung Foundation, when discussing “How air pollution affects your children's lungs”, state “Air pollution can be very worrying as there's only so much we can do about it ourselves. But if your child is healthy, the effects of air pollution are likely to be quite small. The best thing you can do is make sure your child does not breathe in cigarette smoke.” In their article on the effects of air pollution they provide a useful link to the article “Does air pollution kill 40,000 people each year in the UK?” by Dr David Spiegelhalter, Chair of Winton Centre for Risk and Evidence Communication, Cambridge. In this article Dr Spiegelhalter comments: “There are huge uncertainties surrounding all the measures of impacts of air pollution, with inadequate knowledge replaced by substantial doses of expert judgement. These uncertainties should be better reflected in the public debates. In addition, the situation in the UK is not what we would usually think of as a 'crisis'. It can still be good to seek improvements in air quality, but only provided these are based on a careful analysis of the costs per life-year saved.”

From the perspective of action that Government expect to be taken to combat levels of NO₂, it is clear that, despite many reviews of their policy precipitated by three court cases, they see no need to charge motorcycles. DEFRA accept the fact that motorcycles contribute insignificant levels of emissions rendering any action against individual motorcycles irrelevant. The DEFRA guidance clearly states that motorcycles are not expected to be included in any clean air zone charges, even in locations where it is necessary to charge private cars. The sense of this position is reinforced by the fact that not one UK local authority has followed the lead of TfL in choosing to apply a meaningless and counterproductive charge for motorcycles.

We would make it clear that we accept that there is a legal requirement to meet roadside NO₂ levels. However, the major points that you repeatedly fail to address are the cost impacts of the policy in comparison with the scale of the beneficial health outcomes, and the most efficient ways to reduce overall emissions in the shortest possible time without imposing unnecessary financial burden on those least able to bear it. The refusal to accept the additional cost-free benefits to be gained from the exemption from charges and, promotion of modal shift to motorcycles highlights the contradictions and mal-administration of a poorly considered policy.

I will now respond below to your specific points.

ULEZ and motorcycles

We are delighted that the Mayor's Transport Strategy “recognises the role that motorcycles and other powered two wheelers can play in London's future transport system and economy.” It is, however, clear that the MTS does nothing to actively promote and support this mode of transport. The ULEZ policy is a clear symptom of this lack of clarity and understanding of the benefits that could be gained from promoting modal shift from single occupancy cars to PTWs. We have repeatedly highlighted the TM Leuven study that clearly demonstrates that a 10% modal shift from single occupancy cars to motorcycles will result in significant reductions in congestion and a commensurate 5.5% reduction in overall NO₂ emissions. We accept that this is a single study and has not been proven in a real world test, but the logic clearly needs to be tested and the ULEZ provides a perfect opportunity to do so. It is absolutely clear from this study that a ULEZ charge on older PTWs is likely to create a degree of modal shift from PTWs to cars which will inevitably offset any benefit from reducing numbers of older PTWs.

Whilst we appreciate the differences in terms of Euro standards between cars and motorcycles, this is not something that can be pointed to as justification to punish their owners. We stress again that even an older motorcycle is a net reducer of NO₂ emissions. Furthermore, your statement that the Euro3 benchmark is “a proportionate response to motorcycles' contribution to total emissions” is ill-considered given the fact that PTWs are shown in the Leuven study to be net reducers of NO₂ emissions.

Motorcycles are low polluters

Whilst your statement that exhaust emissions regulations for motorcycles began later than for passenger cars is correct, there is clear evidence that, with respect to NO₂ emissions, this is irrelevant. As can be seen from NAEI data NO₂ emissions per mile for cars were vastly greater than for PTWs (in the order of 750% in 1992 when Euro ratings were first introduced for cars) By 1999 when Euro ratings were first introduced for motorcycles cars were still emitting 370% NO₂ compared to motorcycles. In 2007 when Euro 3 rating was introduced for motorcycles, cars produced 220% NO₂ emissions vs PTWs and since 2009 PTW and car emissions have fallen at the same rate with cars emitting 170% NO₂ vs PTWs. Therefore the gap was closed to a point, but is no longer closing. It should also be noted that in 2016 cars were producing 110% NO₂ vs motorcycles at their highest point in 2002. In short the NAEI data shows that the newest cars are dirtier in terms of mile for mile NO₂ emissions than motorcycles have been at any point throughout the last 46 years. In addition, we will also show below that the NAEI figures for motorcycles are actually overestimated.

Your statement that TfL acted proportionately in setting a standard that allows a 12 year-old motorcycle to comply is clearly inaccurate. Charging motorcycles is not just disproportionate, it is actively counterproductive. In order to achieve the stated goals of the ULEZ policy in the shortest time possible, TfL should encourage modal shift to motorcycles.

Motorbikes and congestion

We are delighted that TfL recognise and accept the role of PTWs for reducing congestion. You state that ULEZ "is about reducing emissions – specifically nitrogen oxide (NO_x) emissions from vehicles – it is not designed to combat congestion". We have covered above and demonstrated that reducing congestion reduces NO₂ emissions. Your refusal to apply this logic clearly demonstrates that TfL are not reducing emissions of NO₂ in the "shortest possible time". Again, your reversion to the debunked line "motorcycles can be highly polluting on an individual basis" demonstrates that the ULEZ policy for charging pre-Euro 3 PTWs is flawed and counter-productive.

Emissions data queries

The fact that COPERT is the EU standard vehicle emissions calculator, accepted across the whole of Europe, does not rule out the possibility that it is wrong when it comes to the specifics of PTW emissions. Indeed the fact that it is the only model used creates a dangerous acceptance of the invalid results as there is no independent check carried out to validate its estimates. EMISIA have confirmed that their model does not reflect the benefit gained in terms of NO₂ emissions as a result of the ability for PTWs to filter through congested traffic. This effect has been accurately modelled by the TM Leuven study. The assumption that motorcycles behave exactly the same as cars in congested traffic is fundamentally flawed, but is the standard used throughout Europe. This flaw has been pointed out to TfL but no attempt has been made to correct the models and data output. Your example for the NO₂ emissions for a 4-stroke 125-250cc motorcycle is therefore vastly overestimated. It is interesting to note, however, that the same model returns a staggering result of 0.650g/km for a fully compliant and modest <1.4l Euro6_1 diesel passenger car, approximately three times that of the overestimated result for your example motorcycle.

For the avoidance of doubt, even by the very same over-estimated COPERT modelling, all 2-stroke PTWs, all 4-stroke PTWs >750cc and all Euro2 4-stroke PTWs 250 – 750cc are compliant with the 0.15g/km standard.

You suggest that we have some confusion on degradation factors. We are entirely clear and have had confirmation from EMISIA that there are no degradation factors for motorcycles. We suggest that the confusion is not ours, as a simple review of older COPERT4 and current COPERT5 data demonstrates that some form of increase has been applied to motorcycle emissions. Take, for example, a Euro 1 50cc moped at 30kmh: COPERT5 shows a figure of 0.18g/km whereas COPERT4 shows 0.03g/km. The Euro3

4-stroke 125-250cc in your example from COPERT5 shows 0.218g/km but in COPERT4 shows a compliant 0.114g/km. In short, degradation factors that should not be applied have been applied, once again increasing the overestimation of PTW emissions.

The designers of the EMISIA software actively chose not to include degradation factors for motorcycles due to the fact that there are no known real world data sets for the aging effects on motorcycle emissions. They are clear that the degradation factors for other vehicles do not apply to motorcycles. There is, therefore, no justification for these factors to be applied in TfL or NAEI data sets.

Requirement to prove compliance

We do not contest the ease of using TfL's ULEZ checker, but we have clearly demonstrated here that in very many cases the ULEZ checker will be providing misleading if not incorrect results. As you state, the checker merely establishes (in many cases purely by best guess) whether a particular machine is registered as Euro3. This is very far from a measure of whether the machine is compliant with the emission standard of 0.15g/km for NO₂. It is self-evident that this will lead less well informed users of the checker to assume that they need to pay the charge or take other action when, in reality, they do not. We would suggest this is, at best, poor communication on the part of TfL and, at worst, a deliberate ploy to increase revenue generated by provoking payments from owners of compliant vehicles.

The "opportunity" to supply evidence is not well advertised and is far from simple, not to mention expensive. There is no advice on how to contact manufacturers, what to ask for nor how to proceed if the manufacturer is simply uncooperative. It would have been possible for TfL to accept offers of assistance from the MCIA and other bodies to collate information on compliant pre-Euro3 motorcycles but, to date, the offers of assistance have not been taken up. Why does TfL continue to resist the logic that if a CoC is obtained for one motorcycle the likelihood is that all motorcycles of the same make, model and year of manufacture will be compliant? This is creating a vast financial burden of proof on owners with the average charge for a CoC being in excess of £100. The cost of having a motorcycle tested at Riverbank Motorcycles, the only test centre that TfL have endorsed is £175.

With 115,780 motorcycles registered in London alone, if we accept that, by TfL's estimations, only 20% are pre-Euro3, that equates to 23,156 motorcycles that will need to apply for a CoC or be tested at the single test centre at an estimated total cost of £3.2m. If just 50% of the bikes need to be tested at the test centre that will take over 4 years at the current rate of testing, assuming the test centre works 6 days per week and 52 weeks per year.

Your claim that TfL have "acted reasonably in the circumstances to help motorcycle owners" is evidently untrue. You have created circumstances where over half of those affected could be unable to secure a test for 2 years. This is a profound practical failure that lays TfL open to compensation liability to thousands of riders.

Publicity for ability to submit emissions evidence for pre-Euro3 motorcycles

You state that you have encouraged all drivers to use the TfL vehicle checker. As we have established above, this is most likely to result in many motorcycles that meet the emissions standard being labelled as non-compliant. TfL have issued no press releases or other communications to highlight the fact that the checker merely establishes that a vehicle may or may not be compliant. There have been no communications beyond a few buried comments on a web page to highlight the process to establish genuine compliance or non-compliance, and there is a significant financial barrier to following that process.

Compliance status of pre-Euro 3 motorcycles

You state that the estimates of low motorcycle kilometres driven in the ULEZ “does not remove the need to discourage the 10 per cent of motorcycles that are not Euro 3 compliant from driving in the zone”. We have established that the majority of pre-Euro3 motorcycles are compliant with the arbitrary 0.15g/km standard. We have established that motorcycles are net reducers of NO₂ emissions. We have established that the contribution of PTW emissions is greatly exaggerated in the models. We have established that some riders may opt to switch to more congesting compliant cars that have been shown in the COPERT modelling to emit higher levels of NO₂, in order to avoid charges. We therefore contest that there has been no need established to discourage the negligible numbers of pre-Euro3 motorcycles. With respect to fairness to owners of other vehicle types, we have clearly demonstrated that your argument has no merit. No other vehicle types provide the benefit of reducing congestion and a great many of those vehicles recognised as compliant are actually shown to produce more NO₂ than the motorcycles you wish to charge. We have clearly evidenced a glaring error in your policy.

Finally you use the argument that failing to discourage these pre-Euro 3 motorcycles will “erode the potential air quality benefits of the ULEZ and endanger our efforts to meet legal air quality limits as quickly and effectively as possible.” This statement is entirely wrong as encouraging and supporting use of all PTWs will have the effect of reducing net emissions whereas discouraging them will most likely lead to increased emissions of NO₂.

Cost of obtaining compliance evidence

Here you have demonstrated that the use of CoC as proof of compliance is open to owners of other types of vehicle. This demonstrates that the repeated mention of Euro compliance is irrelevant for the entire ULEZ policy. The only emission standard of any relevance is NO₂. We have comprehensively demonstrated that NO₂ emissions are not defined or reliably predicted by possession of a Euro rating for any vehicle class. We have no objection to TfL providing refunds to owners of other types of vehicle who incur costs to prove their compliance to your mal-administered policy. We would indeed suggest a complete review of the use of Euro ratings as the method of determining NO₂ emissions from all vehicles.

Your view that TfL has gone to “considerable lengths” to make the process straightforward is not one that we are able to accept, particularly when we have demonstrated simple, reasonable steps that TfL could take to entirely remove the burden of proof, for example by accepting CoC relevance to all vehicles of the same make, model and year of manufacture.

Your note that the current charge for testing relating to two weeks of paying the ULEZ charge is frankly insulting when TfL have confirmed that they will not refund back-dated payments and we have demonstrated potential for a 4-year waiting list to get any vehicle tested. Rather than accepting payment that is not due, a far more reasonable approach would be to suspend the charge until a vehicle is proven to be non-compliant. Again, failure to do so appears to be another case of mal-administration.

Reimbursement of ULEZ charges for compliant vehicles

We are unable to accept TfL’s refusal to reimburse ULEZ charges levied on compliant vehicles. Placing an unreasonable burden of evidence upon owners of a vehicle type comprehensively proven to be of benefit to the claimed goals of the ULEZ policy is unjust. The costs and timescales for demonstrating compliance, which naturally incur further non-refundable charges to the owner, are unfair and unnecessary. The refusal to reimburse charges on compliant vehicles clearly demonstrates a contradiction between claimed and actual motivations for the ULEZ policy.

Motorcycle emissions testing

You have mentioned the enquiries from motorcycle dealerships and MOT testers who do not have the necessary dynamometer and gas analyser equipment. We would suggest that a sensible use of the revenue being generated from ULEZ, a proportion of which is coming from motorcycles that are actually

compliant, would have been to fund supply of the necessary equipment for willing dealerships and MOT testers. Taking this approach would have helped to lend credibility to your repeated claims of doing all you can to make proving compliance a straightforward and achievable process. You have failed to explore this simple and reasonable avenue, once again demonstrating that TfL are not making any effort to reduce unnecessary burden on motorcyclists.

COCs and accredited centre test certificates for individual vehicles

Given the number of offers from the MCIA and the Vintage Motorcycle Club to assist with collating this data that, to our knowledge, have not been explored by TfL we find your continued stance on this issue highly disappointing. Once again you are undermining your own claims about going to "considerable lengths". Expecting manufacturers to supply this data in the format you require is clearly illogical when you have already created a revenue stream for those manufacturers from the supply of CoC's.

In conclusion, we must ask once again that you review your decision to exempt motorcycles from the ULEZ charges and suspend current charges whilst this review takes place. We have demonstrated that your basis for the decision is highly unfair and we would suggest the legality of the charge and its application is highly questionable. Ultimately the decision on legality would need to be made by judicial process, not by TfL or the Motorcycle Action Group.

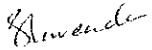
You have asked us to let you know if there is anything further you could be doing to communicate options to our members and riders in London. The simple answer to that is that you first need to provide realistic, cost-free options. You have, in our view, failed to even communicate the high-cost options. As previously mentioned we would suggest that, at the very least, you run a high-profile media promotion of the existing options, clearly laying out the case for the cost to the user, the case for refusal to reimburse charges placed on compliant vehicles and the process to follow to prove compliance. We understand that such a communication would reveal the injustice of your position, but that is a position that is within your gift to reconsider.

We would ask for a direct response to the following questions:

1. What is your specific evidence for the health impacts of current levels of NO₂ in London?
2. What is the context for the evidence that results in London being the only city in the UK that sees a justification for charging motorcycles?
3. What capability do your preferred modelling techniques have to accurately represent the current real world emissions from motorcycles, and the effect of modal shift from cars to motorcycles?
4. What empirical evidence do you have to back your claim that motorcycles can be highly polluting on an individual basis?
5. What evidence do you have to justify TfL's decision to exclude a policy, universally accepted to reduce congestion, from overall efforts to reduce emissions?
6. Why have no efforts been made by TfL to fund the necessary testing equipment to carry out individual testing of motorcycles at dealerships or MOT centres?
7. Why have TfL chosen not to issue a press release to highlight the routes to proving compliance of pre-Euro3 motorcycles?
8. What are the results in your models of modal shift from pre-Euro3 motorcycles to cars?
9. What proportion of motorcycles undergoing individual testing are being found to be compliant with the chosen NO₂ emission standard of 0.15g/km?
10. Why are TfL refusing to publish a list of all pre-Euro3 motorcycles, by make, model, and year of manufacture that have been exempted?
11. What are the benefits to TfL of taking payment of charges on vehicles that meet the compliance criteria for NO₂?

The Motorcycle Action Group looks forward to working with TfL to achieve the correct outcome of exemption for all motorcycles from the expansion of ULEZ in October 2021, allied with a policy to positively promote modal shift from single-occupancy cars to motorcycles.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Selina Lavender', written in a cursive style.

Selina Lavender
Chair
Motorcycle Action Group

Copy to: Keith Prince, Tony Campbell and Sadiq Khan