

BRIEFING TO HEALTH SCRUTINY

Air quality: update on Oldham's local air quality feasibility study and regional approach to air quality across Greater Manchester led by TfGM

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Summary

In January 2018, a report was brought to Health Scrutiny setting out the public health impacts of air pollution in the UK and describing work being done at a Greater Manchester level, through the Greater Manchester Air Quality Action Plan, to address the issue across the conurbation, including Oldham.

In July 2018, an update was provided regarding a local feasibility study Oldham had been legally mandated to carry out by central government. This piece of work directed Oldham Council to examine what measures could be taken to address nitrogen dioxide exceedances on a stretch of Oldham's bypass, the A62.

This report therefore:

- Summarises the outcome so far of Oldham's local feasibility study
- Provides a response to a number of questions raised at Health Scrutiny in July in relation to the local feasibility study
- Updates on the regional approach to air quality across Greater Manchester, being led by TfGM

1.0 Oldham's local feasibility study

- 1.1 The feasibility study Oldham Council was required to carry out was submitted to DEFRA (Department for Environment, Food & Rural Affairs) at the end of July 2018, although the study is still subject to change (see 1.6 below).
- 1.2 The feasibility study required the Council to develop a list of measures which could in theory bring about nitrogen dioxide compliance on a stretch of Oldham's bypass, the A62, in the shortest possible time.
- 1.2 The shortlist of measures that had been outlined in early July 2018 was:
 - Incentivise drivers of light goods vehicles and cars to switch to electric vehicles
 - Incentivise Oldham Council and partner staff to switch to electric vehicles.
 - Renewal, upgrading and further expansion of the electric vehicle charging point network in Oldham.
 - Improve Local Authority fleet to electric and/or low emission through a procurement policy
 - Congestion Deal traffic management (which includes a wide range of options from signal optimization to changes in speed limit).
 - Incentivise private hire vehicles (taxis) to switch to electric vehicles
 - Communications campaigns/awareness raising of health and cost benefits of different modes or around a particular community/schools and programmes to support.
- 1.3 Some of these measures were subsequently discounted based on lack of deliverability.
- 1.4 The Council was then required, by 31st July 2018, to model the remaining measures to establish whether they would actually bring about compliance on the stretch of road in question (i.e. the mandate required the Council to provide a clear evidence base that any measures taken forward would bring about the required reduction in NO_x concentrations by 2021 through detailed emissions and dispersal modelling as well as a sound evidence base for modal shift assumptions.)
- 1.5 Once modelled, none of the stand-alone measures were shown to achieve compliance on the stretch of road in question.
- 1.6 DEFRA are due to publish the final version of Oldham's feasibility study and measures on 5th October 2018, along with studies from 33 local authorities, as a supplement to the "UK plan for tackling roadside nitrogen dioxide concentrations."
- 1.7 It is important to note that whilst measures mentioned may not be taken forward through this local feasibility study (where the Council would have been legally bound to deliver them and could have been vulnerable to further

challenge if compliance was still not achieved), certain measures will still be taken forward as part of ongoing work locally (e.g. 'Improve Local Authority fleet to electric and/or low emission through a procurement policy').

- 1.8 Other measures will be independently progressed through TfGM's regional work (e.g. 'Congestion Deal traffic management'). However, some measures evidenced very clearly that a strong national lead is required because locally driven initiatives will naturally be very limited in their impact due to the scale of change needed (e.g. ('Incentivise drivers of light goods vehicles and cars to switch to electric vehicles').

2.0 Points of query regarding air quality

- 2.1 The following points of query were raised at Health Scrutiny in July 2018 in relation to Oldham's local study.

2.2 ***Method for comparing the difference in air quality between a location where there are trees and a location where there are no trees:***

Unfortunately, the amount of variables which contribute to air quality – both in terms of traffic-related factors (e.g. average speeds, proportion of different types of vehicle, congestion) and non-traffic related variables (e.g. background emissions) mean it that comparing two locations could not be done with any great degree of accuracy.

- 2.3 ***Immediate area of health risk around a road:*** Health risks associated with emissions from traffic on road naturally depend on the road in question (e.g. if a road has very little traffic, the emissions associated will be very low and there for health risks will be proportionately low). However, as a working principle and based on DEFRA guidance, it is acknowledged that from 50 metres from the roadside, air pollution is made up of background emissions only i.e. no direct exposure to traffic-related emissions. Therefore areas within a 50 metre radius of the roadside are exposed to traffic related emissions.

- 2.4 ***Height of air pollution:*** Air pollution tends to reduce with height i.e. the higher up, the lower the exposure.

- 2.5 ***Relationship between trees & air pollution:*** Studies have shown that trees close to roads can reduce particulates matter as they adsorb the particulates on their leaves, as well as reducing NOx levels. There are two main considerations regards planting trees to reduce air pollution as follows:

- **Species type** i.e. the volatile organic compounds of certain types of trees (e.g. oak) can react with the molecules of air pollution and chemical reaction gives off ozone (i.e. makes the problem worse).
- **Position** e.g. if trees are planted to form an avenue with an overarching canopy created, this creates a tunnel for the air pollution and effects dispersal.

However, the beneficial effect of trees on air quality are widely accepted and there are a range of opportunities and locations where schemes of this nature could be considered within Oldham.

3.0 Regional approach to air quality across Greater Manchester

- 3.1 The regional feasibility study being led by TfGM builds on the Greater Manchester Air Quality Action Plan, which aims to improve air quality by:

- **Reducing traffic:** for example, by encouraging travellers to switch from cars to use public transport, cycle and walk more;
- **Increasing efficiency:** improving traffic flow by reducing congestion and stop-start travel to decrease air pollution peaks and to lower emissions overall; and
- **Improving the vehicle fleet:** by encouraging the replacement of older, more polluting vehicles with newer, smaller, cleaner, lower-emission vehicles.

3.2 Actions in the Air Quality Action Plan have been divided into seven main areas:

- **Development management and planning regulation:** including standardisation of regulation and policy across Greater Manchester;
- **Freight and HGVs:** to reduce emissions associated with the movement of freight and goods by road;
- **Buses:** buses have a vital role to play in public transport. New legislation and the development of Greater Manchester's 2040 transport strategy will assist in growing bus usage and improving vehicle standards;
- **Cycling:** building on existing strategies and initiatives to encourage cycling as an attractive and convenient way to travel;
- **Travel Choices:** encouraging the public and businesses to make sustainable travel choices is essential in improving air quality;
- **Cars:** measures to reduce emissions from cars and reduce the number of vehicle trips can make real improvements; and
- **Information and resources:** education and providing information to the public, businesses and policy makers is vital in bringing air quality improvements.

3.3 The legal deadline for submission of the regional feasibility study is December 2018 and as such, each of the individual GM authorities will be required to take the proposed measures through their respective governance processes in order to meet this deadline.

3.4 The draft final version of this regional feasibility study is expected to be available in late autumn and will be taken to the relevant Health Scrutiny sub-group for further discussion on how measures impacting directly on Oldham can be supported locally.