

Subject:	Low Emission Zone – Central Brighton		
Date of Meeting:	14 January 2014		
Report of:	Executive Director Environment Development & Housing		
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Ward(s) affected:	All		

FOR GENERAL RELEASE**1. PURPOSE OF REPORT AND POLICY CONTEXT**

- 1.1 On 9th July 2013 Environment Transport and Sustainability Committee carried a resolution to instruct officers to investigate the development of a Low Emission Zone in the central city area and, after discussion with partners, report back to Committee later in the year on the feasibility of introducing a zone to improve air quality. This report explains the outcome of investigations into how a Low Emission Zone might operate most effectively following discussions with bus companies serving in Brighton and Hove and other partners.

2. RECOMMENDATIONS:

- 2.1 That the Committee declares a Low Emission Zone in Castle Square, North Street and Western Road as far as the junction with Holland Road, with the aim of ensuring that all Public Service Vehicles to meet, as a minimum the Euro 5 emissions standard by 1 January 2015, with only licensed exemptions to this requirement as set out in this report.
- 2.2 That officers are authorised to further consult with bus operators, DEFRA and the Department for Transport with a view to making an application to the Traffic Commissioner for a Traffic Regulation Condition to establish the regulatory framework for the Low Emission Zone
- 2.3 That the Committee notes that officers will consult with taxi drivers on a range of specific proposals and initiatives to reduce taxi emissions for the consideration of the Licensing Committee.

3. CONTEXT/ BACKGROUND INFORMATION

- 3.1 Levels of nitrogen dioxide continue to exceed national and EU limits in parts of the city covered by the revised Air Quality Management Area and have shown little sign of improvement over the past 10 years. Within the city, road transport is the primary cause of breaches in the outdoor nitrogen dioxide limit. It is estimated that man made air pollution shortens life expectancy in the UK by 8 months

- 3.2 There are over 21km of road within the city where nitrogen dioxide limits are exceeded in the Air Quality Management Area. It is estimated this includes more than two thousand roadside residential dwellings. Different types of vehicle are responsible for exceeding limits depending on the location. In North Street buses are the main source of these tailpipe emissions whereas in Viaduct road with no bus routes, diesel cars and goods vehicles are the main reason for limits being breached. A number of taxi ranks reside in areas that exceed limits, at these locations it is a priority to avoid engine idling while stationary. Different action plan measures are recommended in each of these situations and can include policies on engine idling, changes to traffic flow, low emission engines, alternative fuels, planning policies etc. The council encourages the purchase of low emission vehicles by providing electric vehicle charging points, allowing a 50% discount on a low emission permit and other measures.
- 3.3 Emission standards for new vehicles including heavy duty diesel and bus engines are set by the European Union. All new vehicles purchased after an agreed date have to comply with the new standard. Euro 1 standard was introduced in 1992 with the latest Euro 6 standard introduced on 1 January 2014.
- 3.4 A growing number of cities such as Oxford, Norwich and London have implemented Low Emission Zones to prevent the most polluting vehicles from entering the area and setting conditions on vehicles permitted to enter to reduce engine idling whilst in the zone. The London scheme cost £40m to introduce. It covers most of the capital, applies to most vehicle types and is enforced by CCTV with penalties for non compliance. The Oxford and Norwich schemes only allow buses licensed to a minimum Euro emissions standards. This standard can be achieved either by confirming the purchase date of the vehicle or through 'retrofitting' the vehicle engine so that it meets the equivalent standard.
- 3.5 Many vehicles would enter the Low Emission Zone on a relatively infrequent basis such as once per week for deliveries carried out with the engine switched off or even less frequently. As such any improvement in the emissions standard to a vehicle would have a relatively small impact on roadside levels of nitrogen dioxide recorded within the zone. A greater impact on these concentrations is likely to be achieved by improving the emission standards of buses which enter the zone every couple of minutes.
- 3.6 Bus operators in Brighton and Hove have used a range of methods to reduce vehicle emissions. These include 'eco-driver training' to improve fuel consumption and reduce emissions. 'Smart key' apps and online ticketing to reduce passenger boarding time, the use of bus marshals to help relieve congestion at the busiest areas.
- 3.7 Bus services are regulated by the Traffic Commissioner and the emission standard of buses can be legally enforced through introducing a Traffic Regulation Condition which is enforceable by the Traffic Commissioner. In practice the council would be responsible for monitoring compliance and liaising with the bus companies to resolve any difficulties relating to compliance with the Traffic Regulation Condition. In the event of persistent non-compliance the

council could report the bus operator to the Traffic Commissioner for enforcement action by means of fines.

- 3.8 The council would be responsible for licensing any permitted exemptions to the declared Euro 5 Low Emission Zone. These would be negotiable with the bus operators in advance of the application to the Traffic Commissioner for a Traffic Regulation Condition, which would formalise the agreement. The proposed exemptions have been based on the Oxford scheme and are likely to include
- A licensed exemption for buses that would not normally meet the standard but that have been retrofitted to meet the equivalent emissions standard
 - A licensed exemption for low frequency services which enter the zone less frequently than 25 times per week
 - A temporary licensed exemption for a replacement bus due for example to a bus breakdown
 - A temporary licensed exemption for buses that do not meet the standard as at 1 January 2015 but that have an agreed replacement date with a new or retrofitted bus that meets the emission standards
- 3.9 It is proposed that the Traffic Regulation Condition includes a requirement for buses to switch off their engine if they anticipate that they will be stationary for more than one minute and guidelines would be produced to explain how this would operate in practice in consultation with bus operators.
- 3.10 In June 2011 Cabinet resolved to ensure that the council policy on vehicle replacement worked to reduce vehicle emissions. As such all council vehicles entering the zone should be of at least the equivalent Euro standard.

4. ANALYSIS & CONSIDERATION OF ANY ALTERNATIVE OPTIONS

- 4.1 The option of not declaring a Low Emission Zone has been considered. The council will be renewing the Air Quality Action Plan in 2014 anyway and a Low Emission Strategy forms part of the Local Transport Plan and joint working with Sussex partner organisations to highlight best practice in planning strategies. Annual average levels of nitrogen dioxide are however over 50% above limits in some streets as has been the case for the past ten years. It is felt that implementing a zone in line with the recommendations would be a cost effective means of improving air quality citywide within a relatively short timescale and help raise awareness of the issue.
- 4.2 Consideration has been given to using the Quality Bus Partnership as a means of voluntarily agreeing improvements to emissions standards as an alternative to a regulatory scheme. All bus operators in the partnership have demonstrated a willingness to adopt measures to reduce emissions over many years. The introduction of a Low Emission Zone would establish a transparent enforceable standard applicable to all bus operators when operating services in the city.
- 4.3 A range of options were considered in terms of the geographical area of the zone. By limiting the proposed zone to the North Street / Western Road corridor bus operators unable to meet the standard within the required timescales would have the option of re-routing the service to either run along the seafront or stop

at the Old Steine where air quality is within legal limits. Any such change would reduce emissions within the Low Emission Zone and help with capacity issues along this busy corridor. Over 95% of bus movements pass through North Street / Western Road so benefits in cleaner bus emissions made to permit entry to the Low Emissions Zone would still be realised citywide. The boundaries of the Low Emission Zone could be amended at a later time and consideration has been given to initially declaring a zone to cover all or a larger part of the Air Quality Management Area.

- 4.4 Options for limiting access to the Low Emission Zone for heavy goods vehicles to below an agreed emissions standard have been considered, as applied in the London scheme. The cost of retrofitting a filter to meet the emission standard for a lorry is around £4,000 which would mainly have to be met by small businesses with many only needing to access to the zone on an infrequent basis.
- 4.5 Most supermarkets and operators of larger vehicles already have compliant vehicles. The majority of delivery vehicles switch off their engines whilst unloading takes place. Imposing a ban on lorries with poor emissions standards entering the zone could lead to problems with unloading in surrounding residential streets. As such the type of vehicles being used for deliveries within the Low Emission Zone will be monitored to assess their impact on emissions, with advice available on how to reduce emissions and fuel costs. It is not proposed to exclude heavy goods vehicles from the Low Emission Zone initially although this position will be reviewed in reports back to Committee on the operation of the scheme and progress in meeting emissions limits.
- 4.6 Consideration was given to setting emissions standards for minibuses to enter the Low Emission Zone. Although some services are registered with the Traffic Commissioner, minibuses are comparatively infrequent users of the zone and their impact on emissions is therefore small. Many are also operated by voluntary groups or charities and the proposal is to not to impose emissions standards on this class of vehicle.
- 4.7 Limiting private vehicle access (cars, vans and motorcycles) to the zone to low emission vehicles was considered, as is the case with the London scheme. The number of private vehicles entering the proposed low Emission Zone is already very restricted within the proposed zone due to the bus lane. A further reduction of 30% in private vehicle traffic going down North Street is projected if the proposed reversal of Ship Street is accepted by Committee. Enforcement of such a scheme would be expensive to set up both for the council and for car owners to meet the requirements. It would have a relatively small impact on emissions within the zone. As such the proposal is to not to initially impose emissions standards on this class of vehicle

5. COMMUNITY ENGAGEMENT & CONSULTATION

- 5.1 Bus operators have been consulted as part of this report and their responses are included in appendix 2 of this report.
- 5.2 Taxi drivers are being consulted on a range of measures to reduce vehicle emissions and the result of this consultation will be reported back to Licensing

Committee in March. Taxi drivers have been informed of these proposals through the taxi forum. Initiatives such as engine idling policies and fleet diversification whilst not directly linked to the Low Emission Zone should help to reduce emissions and raise awareness of the problem. Most taxis will be euro 5 & 6 standard by January 2015 with most taxi drivers are deploying catalytic converters to reduce emissions. They are reporting their findings back to the forum to share best practice with their colleagues.

5.3 Principles for appointing and revoking ranks by Traffic Regulation Order

Change of use that introduces residential units adjacent to taxi ranks (or vice versa) risks creating new noise and air quality issues.

Change of land use in the vicinity of taxi ranks in favour of commercial, retail or catering could be beneficial for the taxi business and their trade and is less likely to compromise serenity or risk residential complaints for noise, fumes and air quality. Larger developments should explore scope for new taxi ranking close to retail, commercial, catering & transport links but avoid rank provision under or adjacent to residential dwellings.

A similar thread should be promoted for bus stops and loading bays. When bus halts are to be introduced or varied consideration should be given re the distance to the residential building line and the proximity to ground and first floor flats within enclosed streets. Planning should be aware of the implications of change of use for example new residential within a few metres of existing bus stops, taxi ranks and loading bays.

6. CONCLUSION

- 6.1 The introduction of a bus based Low Emission Zone as outlined in this report would provide a cost effective tool to improve the emission standard of buses in the city in a planned and transparent way. The operation of the Low Emission Zone would be reviewed and reported back to Committee 18 months after the start of the scheme by which time tailpipe emissions data should be available for the first full year. The council will use an evidence based approach working with the bus operators to introduce or further develop measures to improve air quality throughout the city. The measures outlined in this report should help further improve the credentials of public transport as a sustainable transport choice.
- 6.2 The report does not recommend excluding other vehicle types from the proposed Low Emission Zone because of the practical considerations outlined in the report. A range of initiatives are under consultation with taxi drivers to improve emission levels at taxi ranks and citywide through for example relaxing licensing requirements to allow the use of low emission vehicles. The Air Quality Management Plan compliments this approach and targeted initiatives based on the specific nature of the problem in each street are being considered.

7. FINANCIAL & OTHER IMPLICATIONS:

Financial Implications:

- 7.1 It is anticipated that costs of officer time, consultation and application to the Traffic Commissioner for Traffic Regulation Condition will be met from within

existing Transport revenue budgets. The ongoing cost of enforcement will be largely officer time which is expected to be funded from existing revenue budgets.

There is potential for a public inquiry on the Traffic Regulation Condition which will require additional costs of officer resource, legal and technical advice for the council's representation.

At present areas of the city exceed national and EU limits for levels of nitrogen dioxide and there is potential for the council to be fined for non compliance with these limits in the future. The introduction of the proposed scheme will therefore reduce the likelihood of non compliance fines.

It is acknowledged that the introduction of emission standards may increase the councils cost of supporting bus services. The proposed Traffic Regulation Condition allows for cost effective compliance measures such as retrofitting of existing buses as well as temporary licenses and exemptions. The council has also received confirmation of DfT Clean Bus Technology Fund grant of £750,000 modification of fifty buses to reduce emissions of nitrogen dioxide and therefore improving compliance with European Union Air Quality Standards.

Finance Officer Consulted Steven Bedford

Date: 12/12/2013

Legal Implications:

- 7.2 The Council has power under sections 7 to 9 of the Transport Act 1985 to apply to the Traffic Commissioner for a Traffic Regulation Condition to regulate bus emissions in order to reduce or limit air pollution. The Condition would be attached to the operator's Public Service Vehicle Operator's Licence. If an operator of an affected service requests it, a public inquiry must be held before the Condition is made.

Lawyer Consulted: Carl Hearsom

Date: 13/12/13

Equalities Implications:

- 7.3 There is a small risk that these proposals could adversely affect the provision of infrequently used bus services in outer areas such as those already in receipt of a subsidy by making them less profitable due to the cost of meeting the emission standards, which could have a negative impact on the elderly and disabled. The proposals contain features to minimise this risk, for example the size of the zone is small to allow alternative routes and there is a temporary exemption to allow bus operators time to reach the required standard over a number of years.

Public Health Implications:

- 7.4 The Brighton and Hove Joint Strategic Needs Assessment 2013 includes a chapter on Air Quality in Brighton and Hove and the impact of vehicle emissions on residents and estimated that there are between 2,000 and 2,500 dwellings exposed to outdoor levels above EU limits. The main risks relate to pulmonary and cardiovascular illness and initiatives to reduce transport emissions will be of benefit to this group as well as residents and visitors as a whole.

Any Other Significant Implications:

- 7.5 There is a risk of a public inquiry if objections are received from the bus companies to the Traffic Regulation Condition advertised by the Traffic Commissioner. The bus operators have been fully consulted on the development of the Low Emission Zone and related conditions to reduce this risk as far as possible. Discussion are planned to continue should the recommendations be approved.
- 7.6 There is a risk that member states of the European Union could be fined if insufficient progress has been made in reducing emission standards to the required limits. Client Earth are a third party that are taking legal action against UK cities for failure of legally binding EU & UK air quality limits. Any fines could be passed on to councils if they are unable to demonstrate that they have acted to address the issue or have through their actions make matters worse.

SUPPORTING DOCUMENTATION

Appendices:

1. Nitrogen Dioxide levels Middle North Street
2. Responses to consultation with bus operators

Documents in Members' Rooms

1. None

Background Documents

1. The Brighton and Hove Joint Strategic Needs Assessment 2013 (6.4.9 Air Quality)
2. Minutes from 9th July 2013 Environment Transport and Sustainability Committee