

Committee	Dated:
Audit and Risk Management	14 06 2016
Subject: Deep Dive: CR21 Air Quality	Public
Report of: Director of Markets and Consumer Protection	For Information
Report author: Ruth Calderwood Environmental Policy Officer, Port Health and Public Protection Dept.	

Summary

Central London experiences high levels of air pollution. Air quality in the Square Mile is unlikely to meet the European health based limit values that have been set for the pollutant nitrogen dioxide until 2025 at the earliest. This is ten years after the legal compliance date.

The City Corporation has a statutory obligation to assist the Mayor of London and government to improve air quality. Failure to do so could result in significant fines from the European Commission. The fines can be passed down to local level. This has been identified as a corporate risk. This is a 'deep dive' report for that risk: CR21 Air Quality.

The following five actions have been identified to demonstrate how the City Corporation is mitigating the risk associated with poor air quality:

- Implement policies in the City of London Air Quality Strategy
- Review and assess air quality in line with statutory obligations
- Become an Exemplar Borough for air quality
- Develop a communications strategy
- Develop and implement a plan for reducing the impact of diesel vehicles

Good progress is being made with all actions. The City Corporation will continue to take action to improve air quality through its Air Quality Strategy until it meets the required legal limits.

Recommendation

Members are asked to note the report.

Main Report

Background

1. Being located at the heart of London, the City experiences some of the highest levels of air pollution in the Country. The main source is diesel vehicles, particularly buses, taxis and vans, with a contribution from boilers, other combustion plant and also construction activity.

2. The Square Mile is affected by pollution generated outside of its boundary. Under certain weather conditions as much as 80% of the pollution measured in the City does not originate within the Square Mile itself.
3. The impact of air pollution on health is both acute and chronic. It is associated with cardiovascular and cardiopulmonary disease, lung cancer and respiratory disease. It also affects lung development in children. Short term pollution episodes can lead to an increase in hospital admissions for vulnerable people. Exposure to current levels of air pollution in central London over the long term has been shown to reduce life expectancy across the whole population. The latest Mayor of London report puts number of premature deaths from air pollution at over 9,000 per annum¹
4. EU Directives require Member States to assess air quality to ensure it meets health based levels, known as limit values. If it does not, the Member State is required to take appropriate action to ensure that the air quality meets the limit values in a reasonable time period. Failure to do so could result in a fine.
5. Air quality in the UK meets the prescribed limits for all pollutants except nitrogen dioxide. The European Commission has commenced infraction proceedings against the UK for missing the compliance date, and for its lack of proposed action to deal with nitrogen dioxide. Following a direction from the Supreme Court in April 2015, the UK government submitted an updated plan to the European Commission in December 2015 outlining further steps that will be taken. This plan is already being challenged in UK domestic courts as it is considered to be too weak. It has been estimated that the fines for non-compliance with the limit value could be as much as £300 million per year.
6. Fine particles (PM_{2.5}) meet current legal limits. However, it is considered that there is no safe level of this pollutant so Member States are required to reduce concentrations by 2020 relative to a 2010 baseline. In London concentrations must be reduced by 15% during this ten year period. The responsibility for this lies with national, not local, government.
7. The main statutory obligation for local authorities in relation to air quality is detailed in the Environment Act 1995. In its local authority role, the City Corporation is required to assist the Mayor of London and the government to meet the air quality limit values. Ultimate responsibility for compliance lies with the government and the Mayor of London. However, if fines are levied on the UK for lack of action, the Localism Act 2012 enables part of the fine to be passed down to local authorities if it can be demonstrated that they have not taken appropriate action. The proportion of the fine would be decided by an independent advisory panel and the ultimate decision could be subject to judicial review by an aggrieved authority.

¹ Understanding the Health Impacts of Air Pollution in London, Kings College London, July 2015.
https://www.london.gov.uk/sites/default/files/HIAinLondon_KingsReport_14072015_final_0.pdf

8. The opinion of the Comptroller and City Solicitor on this matter is that 'mere bare compliance with a statutory duty may not be sufficient (to avoid fines) if other steps could reasonably have been taken which were within the power of the (local) authority in question'. It is for this reason that the City Corporation should have robust plans and policies in place that go beyond its statutory obligation.
9. Local authorities also have a statutory obligation under the Health and Social Care Act 2012 to improve the public health of their population. One of the indicators used to assess performance with this is exposure of the population to PM_{2.5} particle pollution. PM_{2.5} is a size of particle not visible to the naked eye that gets deep into the lungs, and even the blood stream, and does the most damage to health. Levels of PM_{2.5} across the London meet the limit set out in European Directives. However, this limit is higher than the World Health Organisation guideline for health and this is not currently met across London.

Current Position

10. Air quality in the City does not meet the annual average limit value for nitrogen dioxide, although levels have been falling over the past few years. Concentrations are particularly high at busy roadsides such as Upper Thames Street, where it is around three times the limit value, and Beech Street where it is twice the limit value.
11. The main source of air pollution in the City is diesel vehicles. The location of the Square Mile means that it is likely to be one of the last places in the United Kingdom to meet the limit values.
12. Air pollution is largely a central London problem and as a consequence, the Mayor of London intends to introduce an Ultra-Low Emission Zone in the existing Congestion Charge Zone in 2020. Access will be restricted to the cleanest vehicles. Transport for London has predicted that, following its implementation, only areas adjacent to the busiest roadsides in central London will have levels of nitrogen dioxide that don't meet the limit values.
13. The recently elected Mayor of London intends to consult on extending the boundary of the Ultra-Low Emission Zone to the north and south circular roads and on introducing it before 2020. This would lead to greater improvements in air quality.

Risk mitigation

14. In order to reduce the risk associated with financial penalties for non-compliance with the air quality limits for nitrogen dioxide, the City Corporation needs to demonstrate that it has taken, and will continue to take, a wide range of actions to bring about improvements to air quality. The City Corporation must also ensure that any action it takes does not result in an increase in levels of pollution, which could lead to the UK government receiving fines from the European Commission for non-compliance of air quality limit values.

15. The actions which have been chosen to demonstrate risk mitigation for CR21: Air Quality, and progress with each action, are summarised in Appendix A. Further detail on the actions is provided in paragraphs 16 to 19.

16. Air Quality Strategy and Statutory Reporting

- a) As levels of pollution do not meet health based limits in the City, the Corporation has produced an Air Quality Strategy outlining action that will be taken to both improve air quality, and to help people reduce their exposure to the highest levels of air pollution. This is a statutory obligation. The Air Quality Strategy has 10 policy areas with 60 specific actions. A copy has been made available in the Member's reading room and can be found at www.cityoflondon.gov.uk/air. Progress with each action is reported to the Mayor of London and government each year. These are statutory reports.

17. Exemplar borough

- a) The GLA has introduced criteria that should be met for a London local authority to be awarded 'exemplar borough' status. Exemplar borough status will help to mitigate the City Corporation's risk as it will demonstrate that the City Corporation is doing above and beyond what is expected for statutory compliance to improve air quality and reduce public exposure.
- b) Authorities are required to undertake action in the areas listed below. These are already included in the City Air Quality Strategy 2015 to 2020 and the City Corporation will be reporting on progress with these each year:
- Political leadership
 - Taking action
 - Leading by example
 - Informing the public
 - Integrating air quality into the public health system
 - Using the planning system
- c) The City Corporation is recognised as the lead local authority for air quality policy across London. For example, the City Corporation:
- provides the chair for the London Air Quality Steering group;
 - is rolling out the successful vehicle idling engine action days to 10 other London boroughs;
 - commissioned research which led to a change in policy regarding biomass (wood) burning in London due to the potentially high impact on local levels of pollution;
 - carried out the largest community based air quality monitoring project in the UK with Barbican residents;
 - supported an influential piece of air quality research by the independent think tank, Policy Exchange
 - negotiated with Addison Lee, the providers of the current corporate taxi contract, to use petrol hybrid vehicles as default for City employees, with a requirement that drivers switch the engines to electric mode if possible when driving in sensitive areas of the City

- organised a seminar for the construction and demolition industry following the introduction of the Mayor of London's new requirements to control emissions from equipment on construction sites

In addition:

- the Chairman and Deputy Chairman of Port Health and Environmental Services have met the Defra Minister for air quality with key business air quality champions from the City's Air quality business engagement programme;
- the CityAir air quality business engagement programme has been replicated across a number of other London Boroughs;
- The Environmental Policy Officer has recently given a presentation to the Parliamentary and Scientific Committee.

18. Communications strategy

Air pollution in London is taking time to improve to an acceptable level. The City Corporation considers that it is important to advise the public how they can reduce their exposure to poor air quality until the concentration of pollutants in the air meets health based limits.

- a) One of the main ways that the City Corporation provides information to the public about current levels of pollution is through its free smartphone application (App) called CityAir. The App advises users when pollution is forecast to be high and helps the public to understand how they can minimise their exposure to air pollution when moving around the City. There are almost 15,000 active users of the App and it is currently being updated. Sir John Cass School receives direct alerts as children are more susceptible to high levels of air pollution. There are plans to provide alerts to other City schools under the forthcoming air quality communications strategy.
- b) The City Corporation provides additional information on air quality in a number of ways:
 - through the provision of information sheets for the public
 - working with City businesses to provide messages to employees through the CityAir business engagement programme and through Business Healthy www.businesshealthy.org
 - a three year air quality programme with Barts Health NHS Trust to train clinicians to deliver messages to vulnerable people
 - an air quality monitoring programme with City residents to help them understand how pollution varies in an urban environment
 - a variety of media appearances and presentations at a range of forums, including residents meetings, business groups and expert panels.

19. Reducing emissions from diesel

- a) The City Corporation has received a small amount of funding from Transport for London to look into a range of options to reduce the impact of diesel on local air pollution. Work has commenced to consider options, which are likely to include actions to encourage and support new petrol hybrid taxis in the Square Mile.
- b) The City Corporation has applied for funding to establish a Low Emission Neighbourhood in the City. If successful, several measures will be implemented that support and encourage non diesel vehicles.
- c) The City Corporation is very active in dealing with emissions from idling vehicles engines and is currently holding a 'no engine idling action day' each month. This initiative has received national publicity on BBC TV and radio.

Risks and challenges

20. A number of issues make air quality improvements challenging in the City. Many of these are outside the control of the City Corporation.

- a. There are on-going uncertainties around emissions from diesel vehicles. Early signs are that emissions from the newest heavy goods vehicles are low, but emissions from vans and cars still don't meet the required limits. This issue is being dealt with at a European level. Unfortunately there are not many viable alternatives to diesel vans available on the market at the moment which makes it difficult to introduce policies to restrict these vehicles.
- b. The Square Mile is heavily influenced by pollution generated across London. The population and size of the Capital is set to increase and this will impact on local air quality.
- c. The drive for decentralised energy is bringing electricity generation back into the centre of London, with the associated pollution. Combined heat and power plant are being installed in new developments. This plant emits much higher levels of NO_x than gas boilers.
- d. Establishments with large back-up generators are being asked to run them in times of peak energy demand in a process known as Short Term Operating Reserve (STOR). The generators were only designed for emergency use. The need for this type of electricity source could increase as London moves towards an electrified vehicle fleet. The City Corporation is leading on a piece of work with Westminster City Council to develop policy in this area.
- e. Roads closures in the City, and central London more widely, act to displace air pollution. All traffic reduction and re-routing plans need to incorporate air quality considerations.
- f. Taxis and buses, which are responsible for much of the pollution in the Square Mile, are controlled and run by the GLA/TfL.

21. Improving air quality is a key priority for the new Mayor of London. The City Corporation is increasingly being called upon to provide expertise and leadership on air quality across London and on a national basis. To achieve the maximum potential improvement in air quality in the Square Mile, and across the whole of London, additional resources will be required to support current and future initiatives.

Corporate & Strategic Implications

22. The work on air quality supports Key Policy Priority KPP3 of the Corporate Plan: 'Engaging with London and national government on key issues of concern to our communities such as transport, housing and public health'.
23. Improving air quality is overseen by Port Health and Environmental Services Committee and is a priority for the Health and Wellbeing Board. It is also of interest to the Planning and Transportation Committee.
24. In order to fully mitigate against any future risk for non-compliance with the limit values, air quality would benefit from being further embedded into key policy areas across the organisation and having full cross departmental support in recognition of the issue being a corporate risk for the organisation.

Conclusion

25. The City Corporation is making good progress with actions to mitigate the risks associated with poor air quality and is more than fulfilling its statutory duties. Implementation of actions within the City Air Quality Strategy will continue and the impact of the actions will be measured using the extensive network of monitoring equipment already in place.
26. Despite the above, levels of air pollution remain a problem. The introduction of the Ultra-Low Emission Zone will not be sufficient to meet limit values for nitrogen dioxide in the Square Mile within a reasonable time frame. Additional action is required.
27. The new Mayor of London has announced his intention to take further action to improve air quality in the Capital and it is important that the City Corporation continues to support the Mayor and play a major role in developing and implementing effective air quality policy across the Capital.
28. The City Corporation must ensure that all of its corporate policies reflect the need for better air quality and the role that the City Corporation can and should play in achieving this obligation.

Appendices

- Appendix 1 – Risk and Progress Summary for CR21:Air Quality

Background Papers - None**Ruth Calderwood**

Environmental Policy Officer

T: 020 7332 1162

E: ruth.calderwood@cityoflondon.gov.uk