

Committee(s):	Date(s):
Port Health and Environmental Services Committee	21 Jan 2014
Subject: Citizen Science – Air quality monitoring with City residents	Public
Report of: Director of Markets and Consumer Protection	For Information
Summary	
<p>The City of London Corporation has a statutory responsibility to assess air quality and fulfils this duty, in part, by monitoring air pollution at ten locations across the Square Mile. As part of an obligation to improve air quality, local authorities are encouraged to work with communities to improve their understanding of air pollution. External funding has been obtained to work with residents of the Barbican and Mansell Street estates to monitor air quality in their locality and encourage residents to take action to reduce their exposure.</p> <p>The City Corporation has appointed Mapping for Change, a social enterprise based at University College London, to organise and coordinate the monitoring. The Barbican residents have been monitoring air quality since October 2013, and will continue to do so for 12 months. Monitoring with Mansell Street residents will commence in spring 2014. A workshop will also be held for participants to improve their understanding of air pollution in urban environments. Further monitoring may be undertaken with additional residents in the City subject to funding.</p>	
Recommendation	
<p>Members are asked to:</p> <ul style="list-style-type: none"> • Note the report 	

Main Report

Background

1. The City of London Corporation has a statutory duty to assess air quality, and compare the levels of pollution to health-based standards. These standards are set by both the European Union and UK government for a range of pollutants. The City Corporation has an air quality monitoring network, which has been designed with these standards in mind.

2. Air quality in the City does not meet the standards for two pollutants: nitrogen dioxide and small particles (PM₁₀). These two pollutants can have both short term and long term effects on health with children and the elderly being most vulnerable. Air pollution in London is associated with cardiovascular and cardiopulmonary disease, lung cancer and respiratory disease.
3. As part of an obligation to improve air quality, local authorities are encouraged by the Department of the Environment and Rural Affairs (Defra) to work with residential communities to increase the understanding of air pollution.
4. External funding has been obtained from Defra and the Mayor of London Air Quality Fund to work with residential communities in the City to monitor local air quality.
5. Mapping for Change, a social enterprise based at University College London, have been appointed to organise and coordinate the monitoring.

Current Position

6. Fifty three households are currently monitoring nitrogen dioxide outside their properties in the Barbican estate. Monitoring commenced in October 2013 and will continue for a year. Nitrogen dioxide is also being monitored at street and podium level for comparison.
7. Barbican residents will also be measuring small particles (PM_{2.5}) with hand held devices on routes around the City. Ozone will be monitored during the spring and summer of 2014.
8. A similar monitoring programme with Mansell Street residents will commence in spring 2014. Further monitoring with City residents may be undertaken subject to funding.
9. An event will be held for participants during 2014 to feedback the results of the air quality assessment, and for residents to increase their understanding of air quality in the City.

Corporate & Strategic Implications

10. Air quality monitoring with residents supports Corporate Plan policy KPP3:
 - Engaging with London and national government on key issues of concern to our communities: Mayor of London – environment, air quality.

It also supports the following aims of the City Together Strategy:

- 'to support our communities', specifically to 'encourage healthy lifestyles and protect and improve City communities' health and wellbeing'
- 'protect, promote and enhance our environment', specifically to 'identify local air pollution hot spots'.

The work supports the following action within the Port Health and Public Protection Business Plan 2013 – 2016:

- Continue to apply for funding to support air quality improvement work.

Conclusion

11. Monitoring air quality with City residents will help to improve their understanding of how air pollution varies from day to day and in different locations in an urban environment. This will enable residents to reduce their exposure to higher levels of pollution leading to an improvement in health and wellbeing over time.
12. An increased understanding of air pollution and its sources should also lead to greater support for local action to improve air quality in the City.

Ruth Calderwood
Environmental Policy Officer

T: 020 7332 1162

E: ruth.calderwood@cityoflondon.gov.uk