

7 August 2017

## **Decision Session – Executive Member for Environment**

Report of the Corporate Director, Economy and Place

### **Air Quality – Annual Status Report**

#### **Summary**

1. In 2015 DEFRA changed the local authority reporting system for air quality via the introduction of ‘Annual Status Reports (ASRs)’ for all local authorities in England. The ASR replaces the suite of historical ‘Review and Assessment’ reports and is intended to aid local transparency and increase accessibility of air quality to the wider public and encourage buy-in to delivering air quality improvement measures by those best placed to assist (e.g. directors of public health, transport managers etc). This report provides an update on air quality in York, following submission of this year’s Annual Status Report to DEFRA in June 2017.
2. Recent air pollution monitoring data for York (2016 calendar year) indicates that the annual average air quality objective for nitrogen dioxide (NO<sub>2</sub>) is still being breached at a number of locations on the inner ring road which form part of the city centre Air Quality Management Area (AQMA). Whilst average concentrations across the majority of technical breach<sup>1</sup> areas increased marginally in 2016 compared with 2015, there is evidence of a steady downward trend in NO<sub>2</sub> concentrations across the city over the last 7 years.
3. Monitoring undertaken in the Fulford Road AQMA during 2016 indicated that average concentrations across this whole area were within the required levels and are continuing to fall. However, one individual location within the Fulford AQMA continues to return concentrations which are only

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<sup>1</sup> The York AQMAs are made up of a number of locations where the annual average NO<sub>2</sub> objective has regularly been breached (referred to as ‘*technical breach areas*’), plus a number of other roads which connect these locations. Within the technical breach areas properties as well as the highway form part of the AQMA boundary. Outside the technical breach areas only the highway is included in the AQMA boundary. The technical breach areas are currently located around Lawrence Street, Gillygate / Bootham, Nunnery Lane / Prices Lane, Fishergate, Tadcaster Road / Holgate Road, Rougier Street / George Hudson Street, Fulford Main Street and Salisbury Terrace .

just within the NO<sub>2</sub> objective level (based on the upper 95% confidence level for the monitoring technique used). This indicates a location which remains sensitive to local changes in traffic and weather conditions and which could easily fluctuate above and below the air quality objective in future years. In this situation Defra guidance indicates that the AQMA declaration and monitoring should remain in place until levels (including the 95% confidence limits) are consistently within the required air quality objective levels for at least 3 consecutive years. A further year of monitoring is therefore proposed at Fulford Road. If the current downward trend continues it may be possible to completely revoke or reduce the size of the Fulford Road AQMA next year.

4. With respect to the Salisbury Terrace AQMA, annual average concentrations of NO<sub>2</sub> (and the associated upper 95% confidence limits) monitored in 2016 were all well below the annual mean objective of 40µg/m<sup>3</sup>. This has been the case for all sites within the Salisbury Terrace technical breach area for the last 4 years. This indicates that even with slight annual fluctuations in traffic and weather conditions, concentrations of NO<sub>2</sub> in Salisbury Terrace are now expected to meet the required air quality objective limits for the foreseeable future. On this basis, the AQMA (AQMA Order No.3) is recommended for revocation.
5. Elevated concentrations of NO<sub>2</sub> were recorded on Coppergate in 2016 at relevant receptor locations. On the advice of DEFRA, the air quality impacts of recent traffic restrictions and changes to bus services in this area will be evaluated before the city centre AQMA boundary is amended to include this street. Monitoring data for 2017 will be considered in early 2018 as part of the 2018 Annual Status Report.

## Recommendations

6. The Executive is asked to note the contents of the report and:

**Approve** the revocation of the Salisbury Terrace AQMA (Order No.3)

*Reason: historical nitrogen dioxide (NO<sub>2</sub>) monitoring results have been consistently below the health based annual mean objective for this pollutant since 2013*

## Background

7. Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and

cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion<sup>2</sup>.

8. City of York Council has declared three Air Quality Management Areas (AQMAs) where the health based national air quality objectives for nitrogen dioxide (NO<sub>2</sub>) have previously been found to be exceeded. These AQMAs are located in the city centre, in Fulford and along Salisbury Terrace. City of York Council has a statutory duty to try to reduce NO<sub>2</sub> concentrations within these AQMAs and additional obligations in relation to the protection of public health and reduction of greenhouse gas emissions. The main air pollutants of concern in York are NO<sub>2</sub> and particulate matter (PM). Typically traffic is responsible for around 50-70% of the total NO<sub>2</sub> at any particular location in the city, although the exact amount varies according to proximity to roads and other emission sources.

## **Air Quality Monitoring Update**

### **Nitrogen dioxide and progress with compliance in AQMAs**

#### *Overview*

9. Real-time monitoring of nitrogen dioxide and other pollutants has been undertaken at a total of 14 locations across York since 1999. In addition to real time monitoring, City of York Council has also undertaken NO<sub>2</sub> diffusion tube monitoring at up to 340 locations in the city. Results from this diffusion tube monitoring programme were last reported in the Annual Status Report (June 2016). City of York Council currently undertakes diffusion tube monitoring at 233 sites in the city; there has been no significant change to City of York Council's overall monitoring strategy in the last 12 months.
10. Annual mean NO<sub>2</sub> concentrations monitored in 2016 (at real-time monitoring locations) increased at Bootham (+12.8%), Fishergate (+6%), Nunnery Lane (+10.6%), Heworth Green (+1.0%) and Fulford Road (+0.9%), and decreased at Holgate (-4.3%), Gillygate (-1.6%) and Lawrence Street (-3.4%), when compared to concentrations monitored in 2015. Whilst average concentrations across the majority of technical breach areas increased marginally in 2016 compared with 2015 (based on

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<sup>2</sup> Defra. Abatement cost guidance for valuing changes in air quality, May 2013

diffusion tubes and real-time monitoring), there is evidence of a steady downward trend in nitrogen dioxide concentrations over the last 7 years.

11. DEFRA predict that the Yorkshire and Humberside Zone (which includes York) is expected to meet the EU limit values by 2020 (assuming Euro VI diesel engines perform as expected and all local Air Quality Action Plans within the zone are fully delivered). Air quality monitoring and modelling work undertaken by City of York Council indicates that with all the proposed York third Air Quality Action Plan (AQAP3) measures in place, the health based national air quality objectives for NO<sub>2</sub> are likely to be met in all the current air quality technical breach areas in York by 2021.

#### **City Centre AQMA (order 4)**

##### *Compliance with annual average NO<sub>2</sub> objective*

12. During 2016 exceedances of the health based annual mean objective for NO<sub>2</sub> (40µg/m<sup>3</sup>) were monitored in the Gillygate, Holgate, Lawrence Street and Rougier Street/George Hudson Street technical breach areas. The maximum annual average concentrations of NO<sub>2</sub> monitored in the Nunnery Lane/Prices Lane and Fishergate technical breach areas were just below the objective at 36.9µg/m<sup>3</sup> and 37.5µg/m<sup>3</sup> respectively. These concentrations are still considered elevated and upper 95% confidence limits indicate that breaches could still arise in future years. The existing city centre AQMA is still considered relevant for the annual average NO<sub>2</sub> objective but will be reviewed annually.

##### *Compliance with hourly objective*

13. Exceedances of hourly NO<sub>2</sub> objectives (200µg/m<sup>3</sup> not to be exceeded more than 18 times per year) are often highlighted by identifying locations which have annual average concentrations in excess of 60µg/m<sup>3</sup>, particularly where detailed real time monitoring data is not available. A number of locations in the city centre AQMA have previously breached 60µg/m<sup>3</sup> such that the city centre AQMA is currently declared for exceedances of both the annual average and hourly NO<sub>2</sub> objectives. During 2016 all the annual average NO<sub>2</sub> concentrations recorded for the city centre were well below 60µg/m<sup>3</sup> indicating that breaches of the hourly objective are no longer likely to be occurring. Should concentrations of NO<sub>2</sub> remain below 60µg/m<sup>3</sup> in 2017, the city centre AQMA may need amending to remove references to hourly objectives. The highest annual mean concentration of NO<sub>2</sub> recorded by a diffusion tube in the city centre AQMA during 2016 was 49.9µg/m<sup>3</sup> (Tube D19 at the Bridge St / Micklegate junction).

### ***Fulford Road AQMA (order 2)***

14. The Fulford Road AQMA is only declared for exceedances of the annual average NO<sub>2</sub> objective. During 2016 all the annual average NO<sub>2</sub> concentrations recorded in the Fulford AQMA were below the required 40 µg/m<sup>3</sup> objective level. The highest annual mean value was 35.5 µg/m<sup>3</sup> recorded at site C58 (near the junction of Fulford Main Street and Heslington Lane on the northbound carriageway). Whilst the 2016 measured value was well below the 40 µg/m<sup>3</sup> objective level, this particular monitoring site has shown fluctuating results over the past 5 years with upper confidence levels exceeding 40 µg/m<sup>3</sup> in 2 of the past 5 years and the annual average value exceeding 40 µg/m<sup>3</sup> in 2012.
15. Defra guidance indicates that AQMAs should not be revoked until all measurements have fallen well below objective values (for at least 3 consecutive years) to avoid cycling between declaring, revoking and declaring again. The latest results from site C58 indicate that this location remains sensitive to changes in weather and traffic conditions and could be pushed back over the objective level by unfavourable weather conditions or changes in local traffic flows/ composition within the next few years. Given that there is also a large housing construction project currently taking place in this area it is considered that monitoring and the AQMA should remain in place until CYC can be completely confident that levels have dropped sufficiently to make any further exceedances of air quality objectives unlikely (taking into account the expected impact of the development traffic). If levels fall again next year then it may be possible to move towards revocation or at least a reduction in the size of the Fulford AQMA at that point.

### ***Salisbury Terrace AQMA (order 3)***

16. Like Fulford Road the Salisbury Terrace AQMA is only declared for exceedances of the annual average NO<sub>2</sub> objective. Concentrations of NO<sub>2</sub> monitored in the Salisbury Terrace AQMA in 2016 were all well below the annual mean objective of 40µg/m<sup>3</sup>. The highest recorded concentration of NO<sub>2</sub> within the area of technical breach was 34.6µg/m<sup>3</sup> (tube reference 'A20'). Whilst this value is very similar to the maximum recorded value in Fulford for 2016, the monitoring sites on Salisbury Terrace have shown a greater degree of consistency in recent years with annual mean concentrations (and upper confidence limits) at all the Salisbury Terrace monitoring sites being well below the health based annual mean objective for the last four years. There is no other current activity in the Salisbury Road area which is likely to impact on this steady downward trend and on this basis AQMA Order No.3 is recommended for revocation.

### ***Coppergate – update on emerging area of air quality concern***

17. City of York Council's last Annual Status Report, submitted to DEFRA in June 2016, highlighted that consideration should be given to extending the city centre AQMA to include new sites of relevant exposure (residential premises) for the annual mean objective in Coppergate. There are known relevant locations at first floor level and above on both sides of the road on Coppergate. Based on current monitoring results for Coppergate, it is considered possible that the NO<sub>2</sub> annual mean objective is indeed being exceeded in this area.
18. A number of recent changes affecting traffic movements on Coppergate are likely to have a positive impact in terms of air quality. Traffic restrictions were reinstated on Coppergate in January 2017. Only buses and permit holders, including taxis and private hire vehicles, are allowed to use the road between 8am to 6pm, while between 10am and 4pm the area is only open for loading and unloading. In addition various bus services have either been upgraded (Coastliner service to Euro 6), re-routed or discontinued and no longer use Coppergate. Following advice from DEFRA, the air quality impacts of these changes will be evaluated before the city centre AQMA boundary is amended. Monitoring data for 2017 for this area will be considered in early 2018 and reported in the 2018 Annual Status Report. An update will be provided to the Executive Member in 2018.

### **Particulate**

19. National air quality objectives for PM<sub>10</sub> are currently met in York. There are currently no health based objective levels for ultra-fine particulates. The EU limit value for PM<sub>2.5</sub> is 25µg/m<sup>3</sup> as an annual average with an additional requirement to reduce average urban background concentrations by 15% by 2020 (against a 2010 baseline). The annual average PM<sub>2.5</sub> concentrations measured at York's three monitoring stations were 9.8µg/m<sup>3</sup>, 12.0µg/m<sup>3</sup> and 9.0µg/m<sup>3</sup> in 2016, so were well within the EU limit value.

### ***Actions to improve air quality***

20. City of York Council previously produced two AQAPs in 2004 and 2006. These plans were primarily based on modal shift (moving trips to walking, cycling or public transport) and congestion reduction with an emphasis on reducing vehicle trips across the city.
21. However, air quality in York continued to deteriorate between 2004 and 2010, despite introduction of two AQAPs. York developed the UK's first

overarching Low Emission Strategy (LES) in 2012 to tackle emissions from all sources, including a new approach to local air quality management based on reducing exhaust emissions from individual vehicles and encouraging the uptake of alternative fuels and low emission vehicle technologies. The LES has proved particularly effective at tackling emissions from essential service vehicles such as buses, taxis and HGVs which fall outside the scope of trip reduction based modal shift measures.

22. Delivery of modal shift and congestion reduction measures (via the third Local Transport Plan and i-Travel York programme) remain important to air quality improvement and emission reduction in York. They are supported by planning policies that ensure sustainable travel is embedded into all new development in York.
23. Public Protection and Public Health continue to work together. In March 2017 the Council's Public Protection Manager and the Assistant Director of Public Health gave a joint presentation to CYC members outlining the detailed work currently being undertaken by officers on air pollution and health.
24. City of York Council's third Air Quality Action Plan (AQAP3), adopted in December 2015, describes how York intends to continue to deliver its overarching Low Emission Strategy (LES) and to work towards becoming an internationally recognised ultra-low emission city.
25. The LES has already changed the way York delivers public transport and plans for future transport trips. Since publication of the LES, York has:
  - Introduced electric buses on two of York's Park & Ride services at Poppleton Bar and Monks Cross.
  - Retrofitted the world's first electric double-decker sightseeing bus. Transdev is currently working in partnership with City of York Council to convert a further five existing diesel vehicles to full electric drive. The buses are due to be completed by September 2017.
  - Converted around 13% (figure correct as of April 2017) of the taxi fleet (~99 vehicles) to low emission alternatives (Euro 5+ hybrid or electric); most of these were converted through our innovative taxi incentive grant scheme. We have also adopted a new taxi licensing policy specifying minimum emission standards for new or replacement taxis.

- Implemented an extensive ‘pay as you go’ fast charge public electric vehicle recharging network in addition to 11 publicly accessible rapid chargers across the city. The number charging sessions per month is currently 1500 and is rising on a monthly basis (this figure includes charging session by electric buses).
- City of York Council has been awarded £816,000 from the Office of Low Emission Vehicles (OLEV) after becoming the only Yorkshire location out of eight in the country to achieve ‘Go Ultra Low’ city status. The money will be used to fund a city-wide network of hubs, providing ultra fast, reliable and convenient electrical charging.
- Developed Low Emission Planning Guidance. We now require electric vehicle recharge infrastructure, Construction Environmental Management Plans (CEMPs), and emissions mitigation plans on new developments.

26. At the same time York continues to deliver on walking, cycling and public transport improvements, maintaining its national reputation as a leader in sustainable transport. York already has much to celebrate in reducing emissions and protecting and improving the health of its residents. However, with an increasing population and thriving local economy, preventing further emission growth and improving air quality will remain significant challenges for the foreseeable future. Measures in AQAP3 are intended to build upon (but not replace) the modal shift based measures included in previous AQAPs and are intended to support other emission reduction measures in the Climate Change Framework and Action Plan (CCFAP) and the Local Transport Plan (LTP3).

27. Key completed measures and progress include:

- CYC have been involved in a number of events aimed at raising public awareness of air quality issues, including:
  - The Air We Share event (10 Feb 2017, St Sampson’s Square) - Clean Air Roadshow hosted by National Centre for Atmospheric Science. The event was aimed at helping the public to learn more about what’s in the air and what causes it to become polluted.
  - Making the Invisible Visible event (18 March 2017, York Explore Library) – for the public to find out about available air



quality monitoring data, how they can lower their exposure to air pollution and become involved in air pollution monitoring.

- National Clean Air Day (15 June 2017) – promotional work to raise awareness about the air quality impacts of idling vehicles.
- Further development of the LES based Planning Guidance has been achieved via promotion of a standardised approach to assessing and mitigating emissions from new developments across the Yorkshire and Humber region. This has been achieved through a series of workshops undertaken by City of York Council at the YALPAG (Yorkshire and Lincolnshire Pollution Advisory Group) Air Quality forum.
- Ongoing roll-out of the new taxi licensing policy that specifies minimum emission standards for new or replacement taxis. This, in addition to our earlier Low Emission Taxi Incentive Scheme, has resulted in 13% of local taxis upgraded to petrol hybrid or electric vehicles.
- Continued delivery of the Strategic Electric Vehicle fast charge network in York. The number of charging sessions per month is currently 1500 and is rising on a monthly basis. City of York Council was awarded 'Go Ultra Low' city status in 2016 and given funding from the Office of Low Emission Vehicles (OLEV). The money will be used to fund a city-wide network of hubs providing ultra fast, reliable and convenient electrical charging. The first 'hyper-hubs' are due to be installed in January 2018 (new 'hyper' speed standard). CYC is finalising the locations for the new hyper-hubs and evaluating options for 'off-grid' energy production.
- Continued to reduce CYC 'grey fleet' trips by working in partnership with City Car Club to provide a pool of low emission cars for exclusive use by CYC staff during office hours. In addition to promoting the use of low emission car clubs, CYC has also leased a further electric vehicle for 3 years as part of its pool fleet at the Hazel Court Eco Depot.
- Continuation of the York ECO Stars fleet recognition scheme. Funding was identified to support further growth of the scheme until May 2017 and discussions are currently taking place with the provider regarding the future of the scheme. There are currently 83 members and 5300 vehicles in the scheme (as of March 2017) and

membership continues to rise as York benefits from membership of other regional ECO Stars.

- Low Emission Parking Policy – the Council is currently reviewing its parking policy, specifically the discounts available for low emission vehicles. New discounts are currently being worked up for ultra low emission vehicles producing < 75g CO<sub>2</sub> per km.

28 City of York Council's priorities for the coming year are:

- Clean Air Zone - agree responsibility for delivering key elements of the CAZ and agree on an enforcement mechanism (*subject of a separate report to the Executive*)
- Anti-idling Measures - delivery of anti-idling measures via signage and an anti-idling enforcement policy (*subject of a separate report to the Executive*)
- Planning and delivery of strategic EV charging network - City of York Council's successful Low Emission City bid will allow the introduction of solar charged EV points at P&R sites and regional expansion of the York EV charging network.

29. Annex A provides a full update on all current measures in City of York Council's third Air Quality Action Plan (AQAP3)

## **Consultation**

30. The Annual Status Report (2016) has been submitted to DEFRA for consideration; they will provide comments in a timely manner. Local authorities are invited to provide written comments in response to any concerns raised by DEFRA on the conclusions in the report. Following feedback and approval from DEFRA, the report will be made available to the public, local stakeholders, the Environment Agency, Highways England and other relevant departments / stakeholders via the JorAir website: <http://www.jorair.co.uk/index.php?page=reports>

## Options

31. The Executive Member is asked to consider the following options:

### **Decision 1 – Salisbury Terrace AQMA (AQMA Order No. 3)**

- (A) Revoke the Salisbury Terrace AQMA (Order No.3). This is the recommended option.
- (B) Retain the Salisbury Terrace AQMA for the foreseeable future.

32. The recommended options above are presented on the basis of current air quality monitoring evidence in the city over the last few years and reflect recent discussion with DEFRA about AQMA boundaries.

## **Analysis**

### ***Revocation of Salisbury Terrace AQMA (AQMA Order No.3)***

33. LAQM Policy Guidance (LAQM.PG16) and Technical Guidance (LAQM.TG16) outline the process that should be followed with respect to revocation of an existing AQMA. In essence, local authorities can revoke an AQMA following a detailed review. Local authorities should demonstrate that the air quality objectives are being met and will continue to be met (i.e. they should have confidence that the improvements will be sustained). As set out above the annual averages and upper confidence levels on Salisbury Terrace have been well below the  $40\mu\text{g}/\text{m}^3$  objective level for the last 4 years and this is considered sufficient to meet defra's criteria.
34. The decision to revoke an AQMA should be taken following a detailed study, to be appended to the Annual Status Report (due in June of the relevant year). This should set out in detail all the available information used to reach the decision, with the same degree of confidence as was provided for the original declaration. However, in some instances, if compelling evidence exists, the AQMA may be revoked on the basis of robust monitoring evidence. The comments from DEFRA on York's 2016 ASR, highlighted above, suggest this latter approach would be favoured on the basis of an extensive existing evidence base.
35. The following issues are considered relevant to the Salisbury Terrace AQMA revocation:

- *Impact of York Central Scheme* – Whilst the AQMA was declared on the basis of breaches of the health based annual mean NO<sub>2</sub> objective on Salisbury Terrace only, the area covered by the AQMA Order includes the wider area of Leeman Road to the south east, and Water End to the North. This joins the Salisbury Terrace AQMA to the city centre AQMA in the area of the railway station (to the south east) and to Clifton Green to (the north east)). Additional traffic generated on all the surrounding roads as part of the York Central and British Sugar developments could impact upon air quality in this area but this is unlikely to occur in the immediate future and will be accompanied by increasing shift away from diesel vehicles and further uptake of low emission alternatives which will lessen any future impact. Any deterioration in air quality in the future would be picked up through City of York Council's existing air quality monitoring and the Local Air Quality Management process.
- *Impact of buses (especially the Rawcliffe Bar Park & Ride Service)* – existing and proposed bus services along Salisbury Terrace contribute to pollution levels in the street. City of York Council must strive to ensure that vehicles used to service these routes become cleaner and more efficient with time. Any deterioration in vehicle standards may risk the continued compliance with the air quality objectives in this area. It is anticipated that buses operating from Rawcliffe Bar Park & Ride will be Euro VI diesel (*cleaner than the vehicles used at present*) from commencement of the new Park & Ride contract in February 2018 and this will help to reduce current pollutant concentrations on Salisbury Terrace further.

## **Council Plan**

36. Monitoring and reporting on air quality and measures to improve air quality will contribute to the new Council Plan's aim of delivering a prosperous city for all, where local businesses can thrive and residents have good quality jobs, housing and opportunities.
37. Reducing emissions and improving air quality will reduce exposure to harmful air pollutants which can increase the symptoms of chronic and acute illnesses, increase the risk of hospital admissions and in some case result in premature death. Good air quality reduces absence from work and education due to air pollution related illnesses.

38. Air pollution damages buildings as well impacts on peoples health. Improving air quality will help to protect the city's many historic buildings and create a cleaner environment for visitors to York, now an ultra low emission city.

## **Implications**

The various implications of this report are summarised below:

### **Financial**

39. This report has no direct financial implications, however implementation of the measures in AQAP3 will require both capital and revenue funding. Ongoing monitoring of air quality also requires ongoing revenue funding. Any request for funding will follow the council's budgetary process.

### **Human Resources (HR)**

40. There are no human resources implications

### **One Planet Council / Equalities**

41. A community impact assessment was undertaken for AQAP3. Older people, children, pregnant women and vulnerable people with respiratory and other illnesses are more likely to be adversely affected by poor air quality.

### **Legal**

42. CYC has a statutory duty to periodically review the air quality within its area. There is a duty to designate an AQMA where air quality objectives are not being achieved or are not likely to be achieved. Once an area has been designated there is a duty to carry out an assessment and prepare an air quality action plan (AQAP) for the area. DEFRA have issued statutory guidance to which the council must have regard in exercising these functions. This includes annual reporting on progress with delivery of AQAPs via Annual Status Reports. City of York Council's Legal team will assist with any amendments to the Air Quality Management Areas (AQMAs).

### **Crime and Disorder**

43. There are no crime and disorder implications

## Information Technology (IT)

44. There are no information technology implications

## Property

45. There are no property implications

## Risk Management

46. Not applicable

## Contact Details

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### Chief Officer Responsible for the report:

Mike Slater  
Assistant Director, Directorate of Economy  
and Place

Report  Date 19 July 2017  
Approved

**Wards Affected:** List wards or tick box to indicate all      All

**For further information please contact the author of the report**

## Background Papers:

Adoption of York's Third Air Quality Action Plan (AQAP3) - Decision Session  
Executive Member for the Environment, 14<sup>th</sup> December 2014

## Annexes

**Annex A – Progress on Measures to Improve Air Quality**

## List of Abbreviations Used in this Report

ASR	Annual Status Report
DEFRA	Department of Environment Food and Rural Affairs
AQAP3	Third Air Quality Action Plan
AQMA	Air Quality Management Area
CAZ	Clean Air Zone
EV	Electric Vehicle
$\mu\text{g}/\text{m}^3$	Micrograms per cubic metre
$\text{NO}_2$	Nitrogen dioxide
PM	Particulate Matter
LES	Low Emission Strategy
HGV	Heavy Goods Vehicles
OLEV	Office for Low Emission Vehicles
CEMP	Construction Environmental Management Plan
CCFAP	Climate Change Framework and Action Plan
LTP3	Local Transport Plan 3

## Annex A: Progress on Measures to Improve Air Quality

Measure No.	Measure	EU Category	EU Classification	Organisations involved and Funding Source	Planning Phase	Implementation Phase	Key Performance Indicator	Reduction in Pollutant / Emission from Measure	Progress to Date	Estimated / Actual Completion Date	Comments / Barriers to implementation
AQAP3 (1)	Clean Air Zone (CAZ)	Promoting Low Emission Transport	Low Emission Zone	CYC	2016/17	2018	Number of ultra low emission buses operating within York Inner Ring Road	Every electric bus introduced into the CAZ will remove local emissions of NO <sub>2</sub> and PM <sub>10</sub> and reduce CO <sub>2</sub> emissions by approx 35 tonnes.	Supporting feasibility studies completed. Electric buses secured for 3 P&R sites from early 2018 (with remaining P&R fleet being upgraded to Euro 6). A funding bid to support purchase of additional electric P&R buses has been submitted; result expected in 2017	2018-19	Individual buses crossing the inner ring road proposed to be ultra low emission from 2018. The main costs are associated with new buses (cost to third party operators)
AQAP3 (2)	Anti-idling measures	Traffic Management	Anti-idling enforcement	CYC	2014/15	2017	N/A	From feasibility report done by TTR Ltd at 5 busiest service bus locations, estimated savings per annum of 1,526kg NO <sub>x</sub> , 36kg PM <sub>10</sub> , 46,555kg CO <sub>2</sub> , and 17,949 litres of fuel.	Draft Enforcement Policy developed and a survey of potential 'no-idling' sign locations has been completed. Anti-idling exercise with buses, taxis, LGVs and private motorists and media campaign undertaken to promote National Clean Air Day	2018	Main cost is signage. May be some additional staffing and legal costs to be met.
AQAP3 (3)	Further development of ECO-Stars Fleet	Vehicle Fleet Efficiency	Fleet efficiency and recognition schemes	CYC / DEFRA grant funded	2013/14	2013 - 2017	Number of operators signed up to the scheme	A typical van operator could see its annual output of carbon	Eco-Stars scheme launched March 2013. Currently 83 members (as	Funding identified to allow scheme to	The possibility of a local 'procurement' standard for



Measure No.	Measure	EU Category	EU Classification	Organisations involved and Funding Source	Planning Phase	Implementation Phase	Key Performance Indicator	Reduction in Pollutant / Emission from Measure	Progress to Date	Estimated / Actual Completion Date	Comments / Barriers to implementation
	Recognition Scheme							dioxide fall by 6 tonnes per year (see <a href="http://www.ecostars-uk.com/about-eco-stars/why-join/">http://www.ecostars-uk.com/about-eco-stars/why-join/</a> )	of end of March 2017)	run until June 2017	vehicles used by, or to supply, CYC services is being investigated
AQAP3 (4)	Planning and delivery of CNG refuelling infrastructure	Promoting Low Emission Transport	Procuring alternative refuelling infrastructure to promote Low Emission Vehicles, EV charging, Gas fuel recharging	CYC and third party investment (to be identified)	ongoing	To be determined	To be determined	A vehicle running on CNG has lower emissions of NO <sub>2</sub> , PM <sub>10</sub> and CO <sub>2</sub> compared with a diesel equivalent. Detailed emission savings to be determined at planning application stage	CNG feasibility study completed in 2013, potential site identified. No investor identified to date.	Depends on external investment and planning process	Third party investment opportunities currently being explored
AQAP3 (5)	Freight delivery and service plan for key city centre retailers and streets.	Freight and delivery management	Delivery and service plans	CYC	ongoing	ongoing	N/A	N/A	Freight improvement study undertaken in 2013	Currently on hold due to lack of staff resources.	Depends on external investment and planning process.
AQAP3 (5a)	Freight consolidation Centre	Freight and delivery management	Freight consolidation centre	CYC and third party investment (to be identified)	ongoing	To be determined	Number of city centre businesses using consolidation centre.	To be determined	Possible site located. Further work necessary before proposals can be included in the Local Plan.	To be determined	Third party investment opportunities currently being explored
AQAP3 (6)	Development and implementation of LES based	Policy guidance and development control	Air quality planning and policy guidance	CYC	2015	2016	Number of publically Accessible EV parking bays available in	Aims to minimise additional emission impact of development.	LES planning principles embedded into draft Local Development	ongoing	Developers may be required to off-set large emission

Measure No.	Measure	EU Category	EU Classification	Organisations involved and Funding Source	Planning Phase	Implementation Phase	Key Performance Indicator	Reduction in Pollutant / Emission from Measure	Progress to Date	Estimated / Actual Completion Date	Comments / Barriers to implementation
	planning guidance						York (some deliverable via planning process/condition)	Emission savings generally calculated and reported per development.	Plan. LES planning guidance included as Annex to AQAP3 and being actively implemented. This is being promoted through YALPAG (Yorkshire and Lincolnshire Pollution Advisory Group)		damage costs via provision of on-site or off-site facilities and/or contribution towards wider LES measures in York.
AQAP3 (7a)	Reducing emissions from taxis (financial incentive for low emissions taxi purchase)	Promoting low emission transport	Taxi emission incentives	CYC	2014	2015 - present	Number of low emission taxis purchased through the local grant scheme	A hybrid taxi produces approx 8 tonnes per annum of CO <sub>2</sub> less than a diesel equivalent and has considerably lower emissions of NO <sub>x</sub> and PM <sub>10</sub> .	50 low emission taxis purchased through the scheme to date.	Funding for local scheme expired March 2016.	Alternative funding currently being sought to support further implementation of the scheme.
AQAP3 (7b)	Reducing emissions from taxis (taxi licensing emissions controls)	Promoting low emission transport	Taxi licensing conditions	CYC	2016	2017	Number of low emission taxis present in the CYC taxi fleet		New Taxi Licensing Policy approved April 2016	Conditions apply from 1 June 2017 for replacement hackney carriage vehicles, and from 1 Nov 2017 for replacement private hire vehicles.	Following conditions approved by licensing committee in April 2016: Vehicles applying to be licensed as taxis must meet a minimum Euro 5 emission standard for petrol, Euro 6 for diesel, or be ultra low

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											emission vehicles from 1 June 2017 for replacement hackney carriage vehicles, and from 1 November 2017 for replacement private hire vehicles. Operators may experience some increased vehicle replacement costs.
AQAP3 (8)	Planning and delivery of strategic EV charging network	Promoting Low Emission Transport	Procurring alternative refuelling infrastructure to promote Low Emission Vehicles, EV charging, Gas fuel recharging	CYC	ongoing	ongoing	Number of publically Accessible EV parking bays available in York	N/A	EV charging provided at 12 hotels in conjunction with Zero Carbon World  Public Pay as You Go EV charging network implemented in CYC car parks and 3 rapid charging points deployed.  Successful Ultra Low Emission City bid Jan 2016 will provide further charging hubs	ongoing	Money secured through the ULEC bid will be used to fund a city-wide network of hubs providing ultra fast, reliable and convenient electrical charging. The first 'hyper-hubs' are due to be installed in January 2018 (new 'hyper' speed standard). CYC is currently finalising locations for the new hyper-hubs and evaluating

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											options for 'off-grid' energy production.
AQAP3 (9a)	Reducing CYC 'grey fleet' trips	Alternatives to private vehicle use	Car clubs	CYC	ongoing	ongoing	Reduction in annual business mileage	-	In 2014, CYC was awarded the Energy Saving Trust's 'Fleet Hero' award for reducing annual business travel mileage by 20%, CO <sub>2</sub> emissions by 23% and number of vehicles used by 21% (based on 2013 figures).	ongoing	Achieved via a comprehensive suite of green fleet measures.  CYC membership of car club has significantly reduced the number of people using their own private vehicles on CYC business.
AQAP3 (9b)	Introduction of low emission vehicles into CYC fleet	Promoting Low Emission Transport	Company vehicle procurement – prioritising uptake of low emission vehicles	CYC	ongoing	ongoing	Number of full electric and electric hybrid vehicles in CYC fleet	-	As well as promoting use of low emission car clubs, Public Protection have leased an electric vehicle for 3 years for business use	ongoing	The bulk of the LCV fleet is currently mid-life, so it will be 2018/19 before any potential electric vans could replace the current diesel vehicles.
AQAP3 (9c)	CYC Eco-driver training and vehicle emission controls	Vehicle Fleet Efficiency	Driver training and Eco aids	CYC	ongoing	ongoing	Number of CYC staff obtaining ECPO driver training	-	Lightfoot trial completed  Fuel additive trial completed  Programme of mandatory HGV driver training being undertaken (including eco-driving element)	ongoing	-

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AQAP3 (10)	Marketing and Communication Strategy	Public Information	Via the Internet	CYC	2014-2016	2017	Number of visitors on upgraded JorAir website per annum	N/A	Ad hoc public communication work ongoing.  Participated in Clean Air Day 2017.  JorAir website to be updated with health information.	ongoing	CYC involvement in National Clean Air Day involved a city-wide programme of anti-idling initiatives  An upgrade to the JorAir website is still planned but has been delayed due to staff resources. The main improvements will include better data dissemination, improved health advice & use of social media
AQAP3 (11a)	Local incentives for low emission vehicles and alternative fuel use – EV chargers and business demonstrators	Promoting Low Emission Transport	Company Vehicle Procurement – Prioritising the uptake of low emission vehicles	CYC	2015	2016	Number of businesses that have installed EV charging and trialled demonstrator vehicle per annum	-	Nissan Leaf electric vehicle leased for 3 years until May 2019, EV charged at 6 business premises during 2016	ongoing	Additional funding currently being explored for second demonstrator vehicle
AQAP3 (11b)	Local incentives for low emission vehicles and alternative fuel use – Priority	Promoting Low Emission Transport	Priority parking for LEVs	CYC	ongoing	ongoing	Number of low emission permits issued	-	A total of 1401 Low Emission Permits were issued in 2016. (included 893 Household Low Emission Vehicle	ongoing	York residents have previously been entitled to a discount of 50% on the price of parking permit if they

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	parking / reduced parking fees for low emission vehicles								Permits)		operate a low emission vehicle. From 01/04/2017, only vehicles emitting less than or equal to 75g CO2 will be eligible. City of York Council is currently reviewing its parking policy, specifically the discounts available for low emission vehicles.
AQAP3 (12)	Attracting Low Emission industries, businesses and jobs to York	Policy guidance and development control	Other policy	CYC	ongoing	ongoing	-	Not quantifiable	TBA	ongoing	Will support wider air quality improvement measures
AQAP3 (13a)	Modal shift and network improvement measures (i-Travel York)	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	CYC	ongoing	ongoing	% mode split of walking /cycling/bus vs conventional car drivers/ car passengers % trips into city centre	Hard to precisely quantify but target to increase modal shift away from conventional car	Ongoing delivery and funding of I-travel York sustainable travel programme	ongoing	Subject to ongoing funding
AQAP3 (13b)	Modal shift and network improvement measures (Bus Improvements)	Transport planning and infrastructure	Public transport improvements interchanges, stations and services	CYC	ongoing	ongoing	National Annual Passenger satisfaction survey	Aim to increase uptake of public transport	Bus improvements in progress, including Rougier Street	2018	-

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AQAP3 (13c)	Modal shift and network improvement measures (Other LTP measures)	Transport planning and infrastructure	Other	CYC	ongoing	ongoing	Concentration reduction target in LTP3 and AQAP3	-	See <a href="https://www.york.gov.uk/info/20108/local-transport-plan/1430/local-transport-plan-2011-2031">https://www.york.gov.uk/info/20108/local-transport-plan/1430/local-transport-plan-2011-2031</a>	ongoing	CYC's third Local Transport Plan (LTP3), covering the period to 2031, sets out the transport policies and measures that will contribute to the city's economic prosperity over the next 20 years, whilst meeting challenging national and local targets for reducing emissions.
AQAP3 (14)	Other air quality improvement measures (non-transport sources)	Environmental Permits	Introduction/Increase of charges through permit systems and economic instruments	CYC	ongoing	ongoing	Number of scheduled inspections completed per annum		Enforcement of relevant air quality legislation is currently undertaken by Public Protection	ongoing	Scheduled inspections undertaken by CYC public protection staff.
AQAP3 (15)	Provide more green infrastructure	Policy Guidance and Development Control	Other policy	CYC	ongoing	ongoing	tba	-	Committed to developing a Green Infrastructure Strategy for York and good progress in being made.  Green Infrastructure Forum held November 2014,		The Strategy will support policies in the Local Plan and the Council Plan, whilst being a focus for partnership working across York.  The Strategy will establish a long term vision for

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									<p>with further stakeholder workshop sessions in January 2015.</p> <p>Consultants AMEC have been commissioned to help carry out the Green Infrastructure Strategy project in partnership with CYC. Further information on progress can be found here: <a href="https://www.york.gov.uk/info/20051/planning_policy/637/green_infrastructure_gi_strategy">https://www.york.gov.uk/info/20051/planning_policy/637/green_infrastructure_gi_strategy</a></p>		the planning and management of Green Infrastructure across York, identifying where the protection and enhancement of green spaces and natural elements can be achieved, improvements in connectivity between places realised, and focal points for community and business involvement established.
<b>Additional measures not specifically in AQAP3</b>											
16	Further conversion of diesel double decker tour buses to electric	Vehicle Fleet Efficiency	Vehicle Retrofitting programmes	CYC / Grant Funding	2015	2017	Number of buses converted to electric	Conversion to electric drive will remove bus tailpipe emissions	One demonstration bus converted, 5 more currently being converted to electric drive and expected to be in operation for the summer 2017 season	2017	-
17	Retrofitting of school buses	Vehicle Fleet Efficiency	Vehicle Retrofitting programmes	CYC / Grant funding	2015	2017	Number of retrofitted school buses		28 buses to be retrofitted pending outcome of current school bus procurement exercise	End 2017	Cleaner bus technology funding £308K obtained to support this



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18	Solar panels at electric P&R sites	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	CYC	2016	2017	Amount of energy generated by solar panels	-	Funding awarded	2018	Supply of green energy to encourage the uptake of EVs
19	Hyper Hubs	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	CYC	2016	2018 onwards	Number of charging episodes at hyper hubs	-	Funding awarded through Ultra Low Emission Cities Scheme	2020	The money secured through the ULEC bid will be used to fund a city-wide network of hubs, providing ultra fast, reliable and convenient electrical charging. The first 'hyper-hubs' are due to be installed in January 2018 (new 'hyper' speed standard). City of York Council is currently finalising the locations for the new hyper-hubs and evaluating options for 'off-grid' energy production.