

Title of meeting:	Environment and Community Safety Portfolio Decision Meeting
Date of meeting	21 st September 2017
Subject:	Assessment of Air Quality - Annual Statement Report 2016
Report by:	Director of Culture and City Development
Wards affected:	All
Key decision:	No
Full Council decisi	on No

1. Purpose of report

- 1.1. To update the Cabinet Member for Environmental and Community Safety on the:
 - review and assessment of air quality in Portsmouth and the publication of the 2016 air quality Annual Status Report (ASR)
 - conclusions of the 2017 air quality Source Appointment Study (SAS)
 - National Air Quality Action Plan (NAQAP) to tackle nitrogen dioxide as published by Department of Environment Food and Rural Affairs (DEFRA)
 - actions undertaken by Portsmouth City Council (PCC) which are likely to positively impact upon pollution levels in Portsmouth as part of our responsibilities to review, assess and improve air quality locally
- 1.2. To comply with our statutory requirements to publish an ASR annually.
- 1.3. To reaffirm PCCs commitment to Local Air Quality Management (LAQM) to tackle areas of poor air quality and our ambition to reduce levels of harmful pollutant in Portsmouth to protect human health.
- 1.4. To evidence the fact that the work being undertaken to tackle poor air quality is supported by officers and members at the highest levels of council administration and governance.



- 2. Recommendations
- 2.1. That the Cabinet Member for Environment & Community Safety approves:
 - a) the conclusions and publication of the 2016 ASR as attached as Appendix 1;
 - b) the conclusions and publication of the 2017 SAS as attached as Appendix 2.

3. Reason for the recommendations

- 3.1. On the 17th July 2017 PCC again recognised the impact that poor air quality has on health and the need for co-ordinated action to reduce air pollution through the publication of a Local Air Quality Strategy (LAQS).
- 3.2. The 2017 LAQS will help to drive forward improvements aiming towards a healthier city for all, leading on a collaborative approach in reducing air pollution across the city in the shortest possible timeframe. Having published the 2017 AQS an updated local Air Quality Action Plan (AQAP) will follow. Once developed, the AQAP will detail specific measures to achieve this overarching aim.
- 3.3. The publication of the 2016 ASR and 2017 SAS will provide valuable evidence to inform the LAQS and the subsequent updated AQAP, particularly in regard to what actions are necessary, where they should be focused, and to what extent improvements in air quality are required.

4. Abstract of 2016 ASR conclusions

- 4.1. The monitoring data:
 - reveals a deterioration in the level of nitrogen dioxide in several key monitoring locations and that several known pollution hotspot areas remain a concern
 - supports the review of two air quality management areas (AQMA) during 2017 / 2018 with a provisional recommendation of revocation (AQMA 12) / part revocation (AQMA 7)
 - provides evidence that particulate matter concentrations are well below UK Air Quality Directive Objectives (NAQO)

5. Introduction to the 2017 SAS

5.1. A SAS of road traffic sources was carried out as part of our ongoing LAQM responsibilities to quantify the contributions of different road vehicle types to



ambient pollutant concentrations. This was carried out in the areas of likely exceedance to determine the emission reductions required to achieve compliance with those objectives and to identify the likely year of compliance.

- 5.2. The following scenarios were modelled:
 - a base year (2015) scenario for the purpose of model verification and to examine current pollutant concentrations in the city
 - a future year scenario (2020) when it was, at the studies conception, anticipated that pollutant concentrations will be within the NAQO at all locations of relevant exposure throughout the city
 - scenario testing of intermediate years to determine the likely earliest year of compliance with the NAQO
- 5.3. The pollutants assessed were nitrogen dioxide and particulate matter of 10 and 2.5 microns in size (PM₁₀ and PM_{2.5}).

6. Summary of 2017 SAS Conclusions

- 6.1. Total background percentage concentrations of nitrogen dioxide in 2020 are, in the vast majority of locations, greater than those generated by local vehicular traffic sources.
- 6.2. In 2020 the largest reductions required to meet the NAQO are estimated at sensitive receptor locations along the London Road / Kingston Road / Fratton Road corridor within AQMA 6.
- 6.3. It is estimated that reductions in road nitrogen oxide emissions of up to 15% in 2020 would be required in order to achieve the NAQO at all modelled receptor locations within AQMA 6. Elsewhere annual mean nitrogen dioxide concentrations are predicted to be below the NAQO and so reductions in road nitrogen oxide emissions to attain the NAQO are not required.
- 6.4. Annual mean particulate concentrations in 2020 are predicted to be well below the annual mean NAQO at all locations in Portsmouth and so reductions to attain the NAQO are not required.
- 6.5 That, 'best case', the NAQOs will be achieved by 2020. However, a less optimistic and more likely prediction for compliance is 2022.

7. DEFRA's National Air Quality Action Plan (NAQAP)

- 7.1. During 2017 PCC has been in regular dialog with DEFRA in regard to their NAQAP to tackle high levels of nitrogen dioxide and whether PCC should introduce additional measures to those proposed within our LAQM protocols.
- 7.2. DEFRA has confirmed that its data for Portsmouth shows that the current areas of exceedance of the NAQO will fall within compliance levels by 2021.



- 7.3. As a result DEFRA has confirmed within their NAQAP dated 26th July 2017 that no requirement for closer joined up work with their experts is necessary and that Portsmouth has not been named as an urban area with higher levels of pollution where additional measures, such as clean air zones, are required.
- 7.4. DEFRA has however stated that it will continue to take a close interest in the work that Portsmouth is undertaking in creating our own local AQAP to drive forward improvement in local air quality through the 2017 AQS.

8. PCC's Air Quality Progress Report (AQPR) and forthcoming AQAP

- 8.1. Despite the challenges faced, significant progress has been made to improve air quality in Portsmouth over the past year and to drive forward future improvements.
- 8.2. A key element of work that has contributed towards encouraging and supporting modal change and awareness of sustainable travel has been undertaken through the Sustainable Travel Transition Year fund. A number of schemes were implemented through this work, such as personalised journey planning, workplace travel planning initiatives, travel to school initiatives and developing and promoting cycling. All of these measures have played a part in raising awareness of and making improvements to local air quality. Similarly, a number of schemes developed through the Local Transport Plan have contributed to local improvements, such as the introduction of cycle lanes, traffic calming and junction improvements, reducing speeds, creating safer pedestrian environments, and improving vehicle flow.
- 8.3. Additionally, PCC is moving forward with air quality improvements through use of new technology, after successfully securing funding to develop an innovative IoT (Internet of Things) and Big Data platform for Portsmouth's Traffic Management Centre. This project will develop capabilities in monitoring traffic conditions on the network and provide an understanding of current journey patterns through the collection of data sources into one platform. Understanding more about journey patterns and travel demand will help to develop schemes to encourage modal shift to more sustainable options.
- 8.4. A comprehensive list of the projects, which can be linked to improvements in air quality, can be found within Table 2.2 the 2016 ASR.

9. Equalities Impact Assessment

9.1. A full equality impact assessment is not required as the recommendations do not have a negative impact on any of the protected characteristics as described in the Equality Act 2010. The provisional EIA is attached as appendix 3.

10. City Solicitor's comments

10.1. The timetable submitting the ASR is provided Section 2.5 of the Local Air Quality Management Technical Guidance 2016. PCC acknowledges that it has



not complied with the timetable as prescribed by not providing DEFRA with the information contained within this report by the deadline date of the 30th June. PCC has fully engaged with DEFRA with respect to the delays in publishing this report.

10.2. The aim of the assessment of air quality is to identify with reasonable certainty whether or not a likely exceedance of the national air quality objectives will occur. The Air Quality (England) Regulations 2000 (SI 928) and The Air Quality (England) (Amendment) Regulations 2002 (SI 3043) make it clear that likely exceedances of the objectives should be assessed in relation to the quality of the air at locations which are situated outside of buildings or other natural or man-made structures, above or below ground, and where members of the public are regularly present. It is particularly important that our assessments focus on those locations where members of the public are likely to be regularly present and which are likely to be exposed for a period of time appropriate to the averaging period of the objective.

11. Head of Finance comments

11.1. The costs of continuing to review and assess air quality in Portsmouth will need to be met from within existing budgets. The 2016 procurement of a three year contract to provide the air quality monitoring services within Portsmouth has been funded (with an ability to extend for a further two years should further funding be secured). The situation in respect to funding the contract from 2019 onwards remains unchanged in that the Directorate has identified that it will not have sufficient funding to continue to provide these services at this level.

Signed by: Stephen Baily, Director of Culture and City Development

Appendix 1: 2016 Annual Status Report of Air Quality Appendix 2: 2017 Source Apportionment Study Appendix 3: Equality Impact Assessment

Background list of documents: The following list of documents discloses facts or matters, which have relied upon to a material extent by the author in preparing this report:

Title of Document	Location
NAQAP to tackle	https://www.gov.uk/government/publications/air-quality-plan-for-
nitrogen dioxide in the UK (2017)	nitrogen-dioxide-no2-in-uk-2017

The recommendations set out above in 2.1 above were approved / approved as amended / deferred / rejected by the Cabinet Member for the Environment and Community Safety on

Signed by: Councillor Robert New, Cabinet Member for Environment and Community Safety