

REPORT TO EXECUTIVE

Date of Meeting: 3 November 2020

REPORT TO COUNCIL

Date of Meeting: 15 December 2020

Report of: the Director Net Zero Exeter & City Management

Title: Local Air Quality Management Report

Is this a Key Decision?

No

Is this an Executive or Council Function?

Council

1. What is the report about?

- 1.1 To present the statutory Annual Status report that has been submitted to the Department of Environment, Food and Rural Affairs (DEFRA). This contains the monitoring data from 2019 and a summary of the actions taken in that year to improve local air quality. It does not contain information on pollution levels during 2020 or a discussion of the impact of Covid-19 control measures. These will be discussed in the 2021 annual report, following a thorough investigation and having regard to any guidance that has been published by DEFRA to assist local authorities in this particular task.
- 1.2 The Status Report shows that the long term trend in nitrogen dioxide levels in the city is downward. Fewer areas of the city now exceed the objective level than have done so in previous years. The remaining areas are Alphington Street, parts of Livery Dole and Fore Street (Heavitree) and East Wonford Hill. The City Council continues to work with Devon County Council to implement the Air Quality Action Plan, reduce car use and reduce the impact of poor air quality on health.
- 1.3 The Status Report has been appraised by DEFRA and found to meet the required standard.

2. Recommendations:

- 2.1 That Executive Committee notes the statutory annual status report.
- 2.2 That Council notes the statutory annual status report.

3. Reasons for the recommendation:

- 3.1 Action on local air quality is a legal duty placed upon the Council (and all district and county councils) by Part IV of the Environment Act 1995. Safeguarding air quality will help reduce any detrimental effects from air pollution on the health and wellbeing of Exeter's population. We are required under this legislation to submit an Annual

Status Report to DEFRA using their template and to present the report to members at a local level.

4. What are the resource implications including non financial resources.

- 4.1 The City Council will continue to monitor air pollution and report on levels. This will take place within existing resources.

5. Section 151 Officer comments:

- 5.1 There are no financial implications contained within this report for Council to consider.

6. What are the legal aspects?

- 6.1 Part IV of the Environment Act 1995 sets out statutory provisions on air quality. Section 82 provides that local authorities shall review the air quality within their area. Section 83 requires local authorities to designate Air Quality Management Areas (AQMAs) where air quality objectives are not being achieved, or are not likely to be achieved (i.e. where pollution levels exceed the air quality objectives) as set out in the Air Quality (England) Regulations 2000. Where an area has been designated as an AQMA, Section 84 requires local authorities to develop an Air Quality Action Plan (AQAP) setting out the remedial measures required to achieve the air quality standards for the area covered within the AQMA.
- 6.2 The Department for Environment, Food and Rural Affairs (DEFRA) has provided statutory guidance in the form of the Local Air Quality Management Policy Guidance (PG16). The guidance gives particular focus to so-called 'priority pollutants' such as Nitrogen Dioxide (NO₂) and so-called 'Particulate Matter' (PM₁₀ and PM_{2.5}) which are relevant to both district and county councils. Local Authorities are required to submit an Annual Status Report (ASR) to the Department for Environment, Food and Rural Affairs in order to report the progress being made in achieving reductions in concentrations of emissions relating to relevant pollutants below air quality objective levels. The completed report is submitted to the Secretary of State (DEFRA) for consideration. DEFRA provide comments back to the Local Authority which the Authority must 'have regard to'.

7. Monitoring Officer's comments:

This report raises no Vires issues for the Monitoring officer.

8. Report details:

- 8.1 There are two national objectives for levels of nitrogen dioxide. These are for the average level over a whole year, which should be below 40 µg/m³, and the average level for one hour, which should not exceed 200 µg/m³ on more than 18 occasions during a year. Local authorities are told that this one hour standard is unlikely to be exceeded where the average level over a whole year is below 60 µg/m³ so this measurement is a commonly used proxy. The annual average objective applies to residential, hospital and education sites. The hourly average objective applies to these sites and to busy streets and workplaces as well.

- 8.2 Exeter City Council has a monitoring network that is designed to identify the areas with the highest levels of nitrogen dioxide, at the locations where the objectives apply. Most of the monitoring sites are therefore on residential properties in close proximity to the busiest roads and junctions in the city. The results of the monitoring conducted by the City Council is not representative of typical or average conditions across the city. Instead most of the monitoring sites are indicative of the worst case locations.
- 8.3 Appendix 3 to this committee report includes graphs showing the ten year trend in concentrations at all the monitoring points inside the AQMA. These show that not only have the number of sites with concentrations above the objective fallen, concentrations have also fallen at every site (albeit with some inter-annual variation).
- 8.4 In recent years the annual average objective has not been met at a number of places in the city. These were Alphington Street, the junction of Blackboy Road and Pinhoe Road, and along the Heavitree corridor into the city. The highest levels are measured on the Heavitree corridor, at East Wonford Hill. Here levels have historically been close to or above the levels which indicates an exceedance of the hourly objective.
- 8.5 The measured results for 2019 can be found in table A.3 of the Annual Status Report (appendix 1). These show that in 2018 levels of nitrogen dioxide at the junction of Blackboy Road and Pinhoe Road (monitoring point DT42) fell to below the objective and remained below it in 2019. If levels remain below the objective for a third year in 2020 this location will be considered to be now compliant with the legal standard.
- 8.6 At Alphington Street (DT19), levels rose from 2017 to 2018 but fell again in 2019 to just above the objective. This pattern whereby nitrogen dioxide levels were generally high in 2018 can be seen in many of the monitoring locations. This is thought likely to have been caused by weather patterns which can have a significant impact on pollution.
- 8.7 Along the Heavitree corridor and at East Wonford Hill some exceedances of the objective remain in the 2019 data, although generally at lower concentrations than in 2018. These locations are DT52 (Livery Dole), DT56 (Fore Street Heavitree Inbound) and DT57 (East Wonford Hill). Levels at DT54 (Salutory Mount) and DT58 (Honiton Road) are also above the objective but these measurements are not made at the facades of the houses so are not considered to be at 'relevant receptors' where the objective is expected to apply. When the results are corrected for the distance to the nearest receptor the objective is **not** exceeded at the façade of the nearest houses (see Appendix B of the Annual Status Report).
- 8.8 At East Wonford Hill (DT 56), levels of nitrogen dioxide were in 2018 above the 60 $\mu\text{g}/\text{m}^3$ levels which is used as a proxy for the short term one hourly average objective. In 2019 levels fell back below 60 again. 2018 is the only year in the last 5 in which this threshold was exceeded.
- 8.9 Some sites have levels between 35 and 40 $\mu\text{g}/\text{m}^3$ (i.e. are close to but not above the objective level of 40). These are DT8 (North Street), DT27 (Cowick Street / Cowick Lane junction), DT34 (Red Cow Village), DT39 (York Road), DT43 (the junction of Blackboy Road and Pinhoe Road), DT51 (Barrack Road at Livery Dole), DT53

(Rowancroft at Livery Dole) and DT66 (Topsham Road near Tollards Road). Away from these locations, but still along the busy routes into and around the city, concentrations of nitrogen dioxide are in the range between 25 and 35 $\mu\text{g}/\text{m}^3$.

- 8.10 As you move away from busy roads, levels fall below 25 $\mu\text{g}/\text{m}^3$. Typical suburban streets with only local traffic flows experience levels of between 13 and 25 $\mu\text{g}/\text{m}^3$. The majority of the population of Exeter therefore live in locations with concentrations of nitrogen dioxide well below the objective, but a small number are exposed immediately outside their homes to levels above the objective. No schools in Exeter experience levels above the objective.
- 8.11 The Annual Status Report also summarises the results of particulate pollution measurements (PM_{10} and $\text{PM}_{2.5}$). No areas in the city are thought to exceed the objectives for this type of air pollution. It should also be noted that local authorities do not have legal duties to achieve the objectives for $\text{PM}_{2.5}$. This responsibility sits with national government in recognition of the fact that the sources of this type of pollution are much less local and may therefore be mainly beyond the local control.
- 8.12 The annual status report also summarises the measures that the City Council has taken in the last year to reduce pollution levels, and the actions that will be implemented in the coming year (table 2.2 of the Annual Status Report). Work in this area is also being co-ordinated with Exeter City Futures and the Sport England Local Development Pilot.
- 8.13 DEFRA's appraisal of the Annual Status Report is included as appendix 2. The matters raised in their commentary are generally positive, for example 'The Council have continued to demonstrate that they are taking an active approach to reviewing and amending their monitoring program where deemed appropriate' and 'Comparisons in NO_2 concentrations have been made between reporting years and the Council have not only considered the impacts of anthropogenic activities (i.e. emissions from roads) but also the impacts of meteorological variation on air quality. This is encouraging to see and demonstrates the Council's wider understanding on the various factors that may influence air quality'.
- 8.14 The only recommendation in the appraisal for future reports is that 'It would be beneficial for the Council to also present diffusion tube concentrations in graphs. It is appreciated at the Council have many monitoring locations, so focus could be made in presenting NO_2 concentrations only within the AQMA. This way NO_2 trends within the AQMA can be made visual and easier to understand for the reader.' This recommendation will be adopted next year for the Annual Status Report and such graphs are included as appendix 3 to this committee report.

9. How does the decision contribute to the Council's Corporate Plan?

- 9.1 Successful implementation of the Air Quality Action Plan will contribute towards all of the Council's Strategic programmes (tackling congestion and accessibility, promoting active and healthy lifestyles, building great neighbourhoods and net zero). The collection of reliable air quality data is a vital part of this process, so that the Council and others can understand the scale, location and trends in pollution objective exceedences.

10. What risks are there and how can they be reduced?

10.1 This report is for the information of the Committee only and there are no risks associated with the recommendation to note the contents of the Annual Status Report. There are risks in the implementation of the Air Quality Action Plan, such as funding and the impact of Covid-19. This is acknowledged within the Annual Status Report. Any necessary alterations to the Action Plan can be made by means of future Annual Status Reports.

11. Equality Act 2010 (The Act)

11.1 Under the Act's Public Sector Equalities Duty, decision makers are required to consider the need to:

- eliminate discrimination, harassment, victimisation and any other prohibited conduct;
- advance equality by encouraging participation, removing disadvantage, taking account of disabilities and meeting people's needs; and
- foster good relations between people by tackling prejudice and promoting understanding.

11.2 In order to comply with the general duty authorities must assess the impact on equality of decisions, policies and practices. These duties do not prevent the authority from reducing services where necessary, but they offer a way of developing proposals that consider the impacts on all members of the community.

11.3 In making decisions the authority must take into account the potential impact of that decision in relation to age, disability, race/ethnicity (includes Gypsies and Travellers), sex and gender, gender identity, religion and belief, sexual orientation, pregnant women and new and breastfeeding mothers, marriage and civil partnership status in coming to a decision.

11.4 In recommending this proposal no potential impact has been identified on people with protected characteristics as determined by the Act because the report is for information only.

12. Carbon Footprint (Environmental) Implications:

12.1 The measures in the Air Quality Action Plan will reduce transport emissions of greenhouse gasses as well as local air pollutants. The plan will therefore help to deliver our carbon reduction target (carbon neutral by 2030).

13. Are there any other options?

13.1 Completing an Annual Status Report and submitting it to DEFRA is a legal duty.

Director Net Zero Exeter & City Management, David Bartram

Author: Simon Lane, Service Lead - Environmental Health & Community Safety

Local Government (Access to Information) Act 1972 (as amended)

Background papers used in compiling this report:-

None

Contact for enquires:
Democratic Services (Committees)
Room 4.36
01392 265275