REPORT TO EXECUTIVE

Date of Meeting: 3 October 2023

REPORT TO COUNCIL

Date of Meeting: 17 October 2023

Report of: Director Net Zero and City Management

Title: Air Quality Annual Status 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 2022 and a summary of the actions taken in that year to improve local air quality.

2. Recommendations:

2.1 That Executive Committee notes the statutory annual status report; and

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 additional financial implications for Council to consider arising from this report.

6. What are the legal aspects?

6.1 Part IV of the Environment Act 1995 (as amended by the Environment Act 2021) 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 (NO_2) and so-called 'Particulate Matter' (PM10 and PM2.5) 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 is a statutory update report relating to the air quality in the Exeter area. Given that, the Monitoring officer has no comment to make.

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 $\mu g/m^3$, and the average level for one hour, which should not exceed 200 $\mu g/m^3$ 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 $\mu g/m^3$ 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 The number of sites which exceed the objective has reduced significantly since the AQMA was declared (a reduction from 32 exceedances in 2009 to one in 2022). The highest levels are measured on the Heavitree corridor, at East Wonford Hill. Here levels have previously been close to or above the levels which indicates an exceedance of the hourly objective but in 2022 were significantly lower at 40.4 $\mu g/m^3$.

8.4 The measured results can be found in table A.3 of the Annual Status Report (appendix 1). Trends in annual nitrogen dioxide concentrations can also be seen in Figure

A.1. These show that in 2020 levels of nitrogen dioxide at every site, including East Wonford Hill fell to below the objective levels. This significant fall was caused by a reduction in traffic flows as a result of COVID-19. There was a rebound in 2021, but not back to pre-pandemic levels. A further fall was seen from 2021 to 2022, back to close to 2020 (lockdown) levels.

8.5 This pattern is partially explained by traffic flows, which fell dramatically in 2020 and rebounded partially in 2021. They increased again in 2022 (Table 3.1 in the Annual Status Report contains data from Devon County Council) but still not back to pre-pandemic levels. It is still too early to say whether traffic flows will eventually return to pre-pandemic levels and if they do whether this will be matched by a full return in air pollution levels as well. At the same time as the changes caused by Covid, there will also have been changes in the vehicle fleet which should have reduced emissions from newer vehicles. Additional variability is also introduced by weather and other factors that affect pollution concentrations on a year to year basis. These factors will continue to be evaluated in future reports, looking at the data from 2023 and beyond.

8.6 No sites had levels in 2022 between 35 and 40 $\mu g/m^3$ (i.e. close to but not above the objective level of 40). Most locations along the busy routes into and around the city had concentrations of nitrogen dioxide in the range between 25 and 35 $\mu g/m^3$ during last year.

8.7 As you move away from busy roads, levels in previous years have fallen below 25 $\mu g/m^3$. In 2022, levels in these areas were typically between 10 and 15 $\mu g/m^3$ for purely suburban streets and between 15 and 20 $\mu g/m^3$ for local through routes. 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 at home to levels above the objective. No schools in Exeter experience levels above the objective.

8.8 NO_2 levels in Exeter have at most sites have fallen since a peak in 2009 then were broadly stable in the four years prior to 2020. 2020 was exceptional, in terms of the reduction in traffic flows during some parts of the year but it is likely that trends in travel habits, homeworking etc will continue to evolve. Trends in air quality generally take several years to emerge even when other factros are stable, because of the annual variability caused by weather. What the long term impact of the changes started by COVID-19 will be on air quality is uncertain. As trends do appear, any necessary changes to the AQMA orders or Air Quality Action Plan (AQAP) will be reported in future Annual Status Reports.

8.9 The Annual Status Report also summarises the results of particulate pollution measurements (PM_{10} and $PM_{2.5}$). 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 $PM_{2.5}$. 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.

8.10 The annual average EU limit value for $PM_{2.5}$ is 25 $\mu g/m^3$ and there is no suggestion that this level is being exceeded in Exeter. The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 introduce a target for national government of 10 $\mu g/m^3$ as an annual mean, to be achieved by 2040. Currently it seems likely that large

parts of Exeter meet this level (based on national modelling) but areas close to specific sources may not. The Regulations also introduce a population exposure reduction target for national government; that there is at least a 35% reduction in population exposure by the end of 31st December 2040, as compared with the average population exposure in the three-year period from 1st January 2016 to 31st December 2018.

8.11 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 the Sport England Local Development Pilot.

8.12 The Council has been awarded grant funding from DEFRA in 2023 for a project that aims to provide further information on pollution levels in the Heavitree corridor area, using machine learning, and to disseminate that information to the local community. As this project has only just commenced, detailed information regarding the findings of this project will be presented in next year's annual status 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 (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 exceedances.

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

10.1This 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. 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. An equalities assessment was conducted as part of the production of the Air Quality Action Plan.

12. Carbon Footprint (Environmental) Implications:

12.1 Measures to improve local air quality will also reduce carbon emissions from transport (although the opposite is not always true). The recommendations of this report therefore align with and support the Council's 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 and City Management, David Bartram

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

Background papers used in compiling this report:-

None

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