

Air Quality Position Statement May 2018



1. Purpose

- 1.1 This position statement provides an update on the activities carried out by Chelmsford City Council in respect of air quality, how it is addressed in the new Local Plan, and current and future air quality in Chelmsford.

2. Local Plan

- 2.1 The Local Plan is based on nine Strategic Priorities, the first of which is Ensuring Sustainable Patterns of Development. The Plan seeks to deliver sustainable development which meets the needs of Chelmsford without compromising future economic, social and environmental matters.
- 2.2 To ensure this is delivered through development, the following Policies are included in the Local Plan:
- Strategic Policy S2 – Securing Sustainable Development: an overarching policy which seeks to address climate change in its widest sense including economic, social and environmental conditions.
 - Strategic Policy S3 – Addressing Climate Change and Flood Risk: this policy seeks to ensure development will mitigate and adapt to climate change through, among other requirements, reducing the need to travel and providing for sustainable travel modes.
 - Policy PA2 – Contamination and Pollution: this policy recognises that all development has some environmental impact, but requires development to minimise this. Developers will need to assess the impact of proposals on matters including air quality.
- 2.3 To support development of the Local Plan, a Sustainability Appraisal/Habitats Regulations Assessment (SA/HRA) has been carried out at each stage to assess site options and policies against a range of social, economic and environmental indicators to help identify all the likely significant effects. This leads to proposals for how any effects can be avoided, reduced or mitigated, to ensure the Local Plan promotes sustainable development.
- 2.4 The SA/HRA uses 14 objectives to appraise the Local Plan; Objective 10 is Air: To improve air quality. This is interrelated to legislative frameworks and guidance at both the European and UK level, including the EU Air Quality Directive and the UK National Air Quality Strategy.
- 2.5 The SA/HRA concludes that in respect of air quality, any negative effects would principally reflect the impacts associated with construction and operation of new development, but that the Local Plan policies would ensure that significant adverse effects would be avoided.
- 2.6 The concentration of new residential and employment development in and adjacent to urban areas, the promotion of strategic mixed use sustainable urban extensions – the largest of which reflects Garden City principles – and the delivery of strategic improvements to the walking/cycling network (including through Green Wedges)

are all likely to reduce the need to travel by car and reduce associated emissions to air.

3. Current Air Quality in Chelmsford

- 3.1 The main source of air pollution in Chelmsford is road traffic emissions from major roads, notably the A12, A414, A138, A130 and B1016. Other pollution sources, including commercial, industrial and domestic sources, also make a contribution to background pollution concentrations.
- 3.2 Local authorities have a duty to undertake a full review and assessment of air quality in accordance with the National Air Quality Strategy. Where there is a likelihood of a national air quality objective being exceeded, a council must declare an Air Quality Management Area (AQMA).
- 3.3 To meet these obligations, the Council publishes an annual Air Quality Status Report (http://www.essexair.org.uk/Reports/Chelmsford_ASR_2017.pdf). The 2017 report includes one AQMA in the Chelmsford City Area, focused on the Army and Navy Roundabout which serves as a junction to both the A1114 and the A138 Chelmer Road, because at peak times, the junction exceeds the Air Quality Objective for Nitrogen Dioxide (NO₂). However, Chelmsford City Council has measured no exceedances of the Air Quality Objective for PM₁₀ since 2010.
- 3.4 The report concludes that there was a small increase in measured concentrations between 2015 and 2016, similar to other Essex local authorities. Although this does not itself indicate an upwards trend, long term monitoring is necessary. This would allow meteorological variation to be taken into account.
- 3.5 The Council has also undertaken a high level assessment of sites allocated in the Local Plan, as shown on the Local Plan Policies Map, using the EarthSense postcode checker (www.chelmsford.gov.uk/resources/assets/attachment/full/0/1150501.pdf).
- 3.6 This provides a strong indication of air pollution over 2016, and uses a rating of 1 (good) to 6 (heavily polluted). A rating of 1 (good) means there is an extremely low chance of nitrogen dioxide levels exceeding the annual legal limit. The air in this rating area is generally clean. A rating of 2 (moderate) means there is a low chance of nitrogen dioxide levels exceeding the annual legal limit. The air in this rating area is generally clean and should not cause health concerns except in exceptional weather conditions. Chelmsford has an average rating of good – of 49 sites tested, 7 sites were rated 1-2 (good to moderate), 7 were rated 2 (moderate), and the remaining 35 were rated 1 (good).
- 3.7 The AQMA is subject to an Action Plan, published in 2008. Since the AQMA came into force, the area it covers has been decreased due to reductions in Nitrogen Dioxide (NO₂).
- 3.8 Recently, a number of schemes have been put in place to ensure Chelmsford's overall air quality situation is maintained, for the AQMA and other areas. In 2016, Highways England completed work on the replacement of the Chelmer Viaduct on the A138 Chelmer Road. This follows on from the successful works on Parkway (A1060) which removed a pinch-point on the westbound arm and the creation of an

extended left turn slip lane from Parkway on to the A138 Chelmer Road carriageway to improve traffic efficiency on the Army and Navy roundabout and address the AQMA. To complement the successful CyclePoint secure cycle storage facilities installed at Chelmsford rail station in 2014, the Council has installed thirteen bicycle stands in the Fairfield Road car park and Marconi Plaza to provide additional parking for up to 130 bicycles to encourage sustainable commuting to the railway station

4. Future Air Quality in Chelmsford

- 4.1 As part of the wider corporate responsibilities of the Council, a full Air Quality Impact Assessment (AQIA) has been commissioned to establish a baseline air quality profile for Chelmsford City Council's administrative area. This will also model future air quality and will be used to trigger the need for any local assessment of air quality required as part of future planning applications. This technical report will provide the Council with more baseline data and projections to enable the active management of air quality in Chelmsford.
- 4.2 The first stage of the modelling is to compile a baseline emissions inventory and carry out model verification to check that the model input data and assumptions are appropriate for the area. This includes:
- Traffic model data from Chelmsford's Strategic and Local Junction Modelling
 - Emissions from industrial sources from previous modelling carried out in Chelmsford, and also from the National Atmospheric Emissions Inventory
 - Meteorological data
 - Results of continuous and diffusion tube monitoring for model verification.
- 4.3 Verification of the data is currently being completed. The next steps will be to use the verified model to predict any changes to 2036. The full report is expected to be complete by the end of July.
- 4.4 A variety of further transport schemes are proposed across Chelmsford during the Plan period to 2036, to help relieve congestion and with the potential to reduce associated exhaust emissions. These are outlined in the Local Plan, and include:
- Chelmsford City Growth Package - £15 million for sustainable transport in the City Centre area to alleviate pressure on the road network, and reduce congestion and potentially emissions. Proposals include cycleway improvements and new provision, bus priority measures, and highway capacity improvements.
 - New railway station at North East Chelmsford – to provide sustainable transport to new communities and reduce traffic into the City Centre.
 - Additional Park and Ride provision – to continue the success of Chelmsford's Park and Ride services.
 - New Chelmsford North East Bypass – to close a gap in the strategic network, reduce journey times and reduce traffic congestion over a wide area.
 - Local Plan policies requiring car clubs and electric vehicle charging points in new developments – to support changes in how people travel around.
 - Requirements for developers to provide infrastructure in new developments, or make financial contributions to strategic transport measures.

5. Conclusion

- 5.1 The Local Plan is supported by four evidence base documents that address air quality issues; the Air Quality Management Area Action Plan 2008, Chelmsford Air Quality Annual Status Report 2017, Air Quality Check of Local Plan allocations 2018 and the Pre-Submission Local Plan Sustainability Appraisal/Habitats Regulations Assessment 2018.
- 5.2 This evidence collectively shows that air quality is relatively good in Chelmsford. The technical Air Quality Impact Assessment will provide the Council with more baseline data and projections to ensure the active management of air quality in Chelmsford. In addition, the strategy, policies and proposals of the Local Plan are actively seeking more sustainable means of transport and promoting innovation.