

FAREHAM

BOROUGH COUNCIL

Report to the Health and Public Protection Scrutiny Panel

Date **27 June 2019**

Report of: **Head of Environmental Health**

Subject: **UPDATE ON AIR QUALITY**

SUMMARY

“The UK plan for tackling roadside nitrogen dioxide concentrations” was published in July 2017. Fareham Borough Council was highlighted as one of the Authorities required to produce a targeted local plan to tackle likely exceedances of Nitrogen dioxide (NO₂) levels.

On 27 July 2017, the Department for the Environment Food and Rural Affairs (DEFRA) issued a Ministerial Direction on Fareham Borough Council, along with the other (22) Authorities listed. This Direction required the authority to undertake, and submit by 31 March 2018 an Initial Plan, to be followed by a Final Plan by 31st December 2018.

Both plans have been submitted, approved and funded. Work is now underway to deliver the four measures identified to meet the requirements of a further Ministerial Direction and bring forward projected compliance with NO₂ from 2021 to 2020.

RECOMMENDATION

It is recommended that the Health and Public Protection Scrutiny Panel note the ongoing work in respect of improving air quality in Fareham.

BACKGROUND

1. In recent years, the non-profit environmental law organisation ClientEarth has had a series of successful court rulings against the Government in respect of its plans to tackle air pollution, the most significant being in February 2018. This key ruling ordered Ministers to come up with a new plan to bring down air pollution levels within the UK to fall within legal limits within the shortest possible time.
2. The latest plan, "The UK plan for tackling roadside nitrogen dioxide concentrations" was published in July 2017. Fareham Borough Council was highlighted as one of the Authorities required to produce a targeted local plan to tackle likely exceedances of NO₂ levels.
3. The legal limit for NO₂ is 40ug/m³, the Governments National Pollution Climate Mapping tool was predicting 40.1ug/m³ in Fareham. The area of likely exceedance, relates to an area of road from the Delme roundabout through Eastern and Western Way and onto the A27 by Fareham train station. It included the A32 branch from Market Quay 'through-about' and branching into the Portchester Road A27. These areas are shown in Appendix A.
4. The reason for the focus on NO₂ is that long term exposure to it is associated with adverse health effects, including reduced life expectancy. Whilst it is possible that NO₂ acts as a marker for other pollutants the Committee on the Medical Effects of Air Pollutants (COMEAP) has concluded that, on balance, NO₂ is highly likely to cause health impacts.
5. There are many sources of roadside NO₂, however the principal cause nationally is vehicle exhaust emissions. Since 1992 new engines have had to meet Euro Standards on emissions. The latest Standard is Euro 6 for diesel engines and for most vehicles the improvement between Euro 5 to Euro 6 is vast. The Euro 6 standard was introduced from September 2015.
6. On 27 July 2017, the Department for the Environment Food and Rural Affairs (DEFRA) issued a Ministerial Direction on Fareham Borough Council, along with the other (22) Authorities that were listed. This Direction required the authority to undertake, and submit by 31 March 2018 an Initial Plan, to be followed by a Final Plan by 31st December 2018, to identify measures to ensure that legal compliance is maintained.
7. The Government set up the Joint Air Quality Unit (JAQU), who determined the process local authorities must follow and are responsible for directing this work. JAQU are funding the process to develop the plans and also the delivery of the measures identified within them.
8. JAQU set out the very prescriptive approach that local authorities should take in developing their plans. The purpose of these plans was to refine the findings of the National model to understand the extent of the local likely NO₂ exceedance.

INTRODUCTION

9. The first task in December 2017, was to carry out a week long, 24 hour traffic survey within the study area in Fareham. This survey was required to produce a

local evidence base, detailing the scale and composition of vehicle fleet on specific roads by vehicle type (car, bus, HGV etc,) and Euro standard, approximate origins and destinations of vehicle movements and the routing of vehicles through study area, as well as defining the NO₂ concentration modelling. The vehicle data was then fed into an air quality model (Computer program) that modelled points where people might be exposed amongst other criteria as specified in JAQU guidance.

10. The data from the survey also provided important information around the NO₂ source apportionment at the sites with the worst predicted NO₂ exposure.
11. In January 2018, a Strategic Group was set up to oversee the work at Fareham, this is chaired by the Executive Member for Health and Public Protection and included member and officer representation from Hampshire County Council and officer representation from Gosport Council. A Technical Group of officers was also set up to carry out the work and report to the Strategic Group on progress. The Initial Plan was submitted to JAQU in March.
12. Officers worked with consultants to identify exactly what the likely exceedance would be and also refined the option or options which would deliver compliance with legal limits in the shortest possible time. The Final Plan was submitted in December 2018.
13. The air quality modelling was completed in November 2018 and it predicted the worst modelled point with annual average NO₂ exposure of 40.55µg/m³ in 2020, becoming compliant in a 'do nothing' scenario in 2021. This point is located on the A27 where it crosses over Bath Lane in Fareham on Eastern Way. The source apportionment at this point is detailed as Appendix B. Although this shows the majority of vehicles are diesel cars, with such a small improvement required, 0.55µg/m³, any group of vehicles where an improvement can be achieved, may be enough.
14. 2020 is now therefore the target year in which the annual average for NO₂ is predicted to marginally exceed legal levels, at this one single point in Fareham.
15. From an initial investigation of a holistic range of measures which originally targeted a greater reduction of NO₂ exposure over a longer period of time to 2021, a series of reviews have subsequently been undertaken to understand where measures could be scaled for implementation during 2019.
16. These scaled measures were then modelled to demonstrate their relative benefits, to determine whether annual compliance could be brought forward to 2020.

MEASURES

17. The Technical group that was established, included environmental health officers from Fareham Borough Council and transport planners from Hampshire County Council, Fareham & Gosport Borough Council with air quality and transport specialists from the consultants.
18. In January 2018 a long list of more than 60 potential measures was drawn up at workshops attended by Fareham and Hampshire officers from transport, planning and environmental health disciplines, a Gosport Borough Council transport officer,

Atkins technical specialists and a senior representative from the major local bus operator on the peninsula. This long list can be seen as Appendix C.

19. This list of 60 measures were then rated based on detailed scoring criteria and eventually reduced to 12. More detail on how the 12 measures were arrived at and eventually reduced to 4 is contained in Appendix D.
20. Of the 12 measures a number required further feasibility work and funding for this was difficult to justify, as the air quality benefit in terms of NO₂ reduction had not been evidenced, however a number of measures were granted feasibility funding and further work on them was undertaken.
21. The original 12 measures were refined down to seven, during the six months since submission of the Strategic Outline Case in March last year, with their relative justification / Air Quality benefit working assumptions being determined.
22. Given the late emergence of the evidence in terms of the scale of the problem (the worst modelled receptor with an annual average NO₂ exposure of 40.55µg/m³ in 2020). Some of the measures were not deemed to be deliverable in 2019 and others ran out of time for further investigation.
23. This left 4 measures which are evidenced to show some air quality benefit and can be delivered in 2019. These are:- Incentivising the replacement of older diesel taxis, walking and cycling highway improvements, ITS Review (signalling improvements at Market Quay roundabout), bus stop information improvements including Real time information (RTI).

a) Incentivising the replacement of older diesel taxis

Essentially Euro 5 or earlier diesel taxi owners in Fareham can replace them with a Euro 6 and obtain up to £2,450 towards running costs. Up to 130 older taxis could be replaced.

b) Walking and cycling highway improvements

Following some feasibility works a series of 19 cycle infrastructure improvement schemes along the four route corridors. This measure had to be scaled back to those improvements that can be delivered during 2019. This is the only measure that requires a mini procurement exercise from an existing Hampshire framework.

c) ITS Review

Additional detector infrastructure has been deemed as necessary at Quay St. to maximise benefit and improve reactivity across all arms. This should speed up traffic along Eastern Way which results in less pollution.

d) Bus stop information improvements including Real time information (RTI).

72 bus stops across the local area have been identified that do not currently have Real Time Information (RTI). RTI provision is acknowledged as an enabler of increasing public transport uptake, providing greater journey time reliability and information. In the absence of growing local bus services, the impact of RTI is modest.

24. The procurement and project delivery plans have been finalised for those 4 measures together with the calculation of Air Quality benefits for the specific schemes. These measures are now being implemented.

CONSULTATION

25. Once the project had reached the stage at which the 12 measures were defined, public consultation was required. In September the Executive approved the public consultation, and the Council consulted with the public on the measures. This took place from 4th September 2018 and eventually ran until the 15 October 2018. Over 1100 people responded. Generally, most people who took part agree with most measures. There was a distinct disagreement for Measures D (Air Quality Business Engagement Officer) and L (Charging CAZ). Comments in relation to other questions about any charges to be implemented disagreed heavily and said that it would have damaging effects on the local economy. A summary of the consultation results can be seen at Appendix E.

FINAL PLAN

26. JAQU states that the Business case should be drafted following “The Green Book: appraisal and evaluation in central government. This is HM treasury guidance on how to appraise and evaluate policies, projects and programmes. This sets out how to produce such a business case, with the 5 dimensions being: Strategic dimension, Economic dimension, Commercial dimension, Financial dimension and Management dimension. The submission of the Final Plan also required a declaration from the Council’s 151 Officer, to confirm the Council’s commitment to the stated scheme and confirm the robustness of the financial model.
27. The Final Plan was submitted in mid-December. Three of the final four final measures do not require any procurement as they can be implemented through existing arrangements. Only the Walking and Cycling measure requires a mini tendering process from an existing framework, which had to roll over to the New Year.

CONCLUSION

28. On the 19th March 2019, JAQU approved the Council’s plan and issued a further Ministerial Direction on both Fareham and Hampshire County Council requiring delivery of the four measures by the end of December 2019. This was accompanied by confirmation that JAQU will fund those measures as detailed in the plan with funding of £1,391,763.
29. Work has now started on delivery of the measures. The strategic Group and JAQU are overseeing the delivery of these measures, which are due to be delivered by the end of 2019, after which a period of monitoring will take place to measure the success of the project overall.

Enquiries:

For further information on this report please contact Ian Rickman (Ext 4773).

Appendices:

- A:** Area of likely exceedance
- B:** Source apportionment
- C:** Long list of measures
- D:** Measures to investigate
- E:** Consultation results

Background Papers: None

Reference Papers: None