

FAREHAM

BOROUGH COUNCIL

Report to the Executive for Decision 03 December 2018

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| Portfolio: | Health and Public Protection |
| Subject: | Air Quality – Final Plan Submission |
| Report of: | Director of Planning and Regulation |
| Corporate Priorities: | Protect and Enhance the Environment Strong, safe, inclusive and healthy communities |

Purpose:

This report has a dual purpose. The first is to provide an update on the public consultation which commenced following the report to the Executive of 03 September 2018. The second is to obtain authority from the Executive for submission of the Council's Final Plan which will be drafted to meet the Ministerial Direction dated 27 July 2017 Joint Air Quality Unit ('JAQU') requirements and to be consistent with the content of this report.

Executive summary:

Following the Executive decision of 03 September 2018, the Public Consultation was undertaken and since that time further work has progressed on both the proposed measures to reduce roadside nitrogen dioxide and also the air quality modelling to refine the scale of any proposed exceedance. The public consultation was undertaken during September/October and received over 1100 responses. The public was in support of 9 of the 11 measures. The Business Engagement proposal and a Charging Clean Air Zone were the measures that did not receive support. Further details are included with this report. The latest evidence is suggesting that there is one location within the study area that will exceed EU limits in 2020. The modelled exceedance is 40.55 ug/m³ in 2020. 2021 is modelled to show compliance at 38.58 ug/m³. The focus of the project at this late stage as the evidence has been refined, is now achieving a small reduction during 2019 to ensure compliance in 2020 as the shortest possible time. The Final Plan is being finalised and will be submitted before the end of December in order to meet the legal requirements of the Ministerial Direction assuming Executive permission to do so. This report sets out a broad summary of the Final Plan and seeks the delegated Authority for the Director of Planning and Regulation to submit it when finalised. Due to the shortened timescale, 7 of the 11 measures that were consulted upon could not be delivered in time for 2020. The final proposals however do include 4 of the 11 measures that were consulted upon for putting forward to the Joint Air Quality Unit for funding and implementation.

Recommendation:

It is recommended that the Executive delegates authority to the Director of Planning and Regulation, following consultation with the Executive Member for Health and Public Protection, to submit the Final Plan to JAQU as required under the Ministerial Direction.

Reason:

In order to meet the requirements of the Ministerial Direction and to obtain funding from the Government to implement the preferred measures to ensure compliance with EU limits on Nitrogen Dioxide in the shortest possible time and to deliver improvements to air quality and public health within the Borough.

Cost of proposals:

There are no costs associated with this proposal as the Joint Air Quality Unit is funding this work.

Appendices:

- A:** Area of likely exceedance NO₂
- B:** Source apportionment at worst receptor
- C:** Long List of measures
- D:** Measures to investigate further from longlist
- E:** Consultation Results

Background papers: None

Reference papers: Executive Report 3 September 2018 – Outline Business Case and Consultation Proposals

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BOROUGH COUNCIL

Executive Briefing Paper

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| Date: | 03 December 2018 |
| Subject: | Air Quality – Final Plan Submission |
| Briefing by: | Director of Planning and Regulation |
| Portfolio: | Health and Public Protection |

INTRODUCTION

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 latest being in February 2018. The key ruling ordered Ministers to come up with a 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 Nitrogen dioxide levels. The legal limit is 40ug/m3.
3. The reason for the focus on Nitrogen Dioxide is that long term exposure to nitrogen dioxide is associated with adverse health effects, including reduced life expectancy. While it is possible that NO2 acts as a marker for other pollutants the Committee on the Medical Effects of Air Pollutants (COMEAP)¹ has concluded that on balance nitrogen dioxide is highly likely to cause some of these health impacts.
4. The area of likely exceedance highlighted in the latest national plan, for Fareham, relates to an area of road from the Delme roundabout through Eastern and Western Way and onto the A27 by Fareham train station. It includes the A32 branch from Market Quay ‘through-about’ and branching into the Portchester Road A27. These areas are shown in Appendix A.
5. On 27 July 2017, the Department for the Environment Food and Rural Affairs (DEFRA) issued a Compliance Directive 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, Initial Plans. This was completed and submitted under delegated authority granted by the Executive following a report to its January 2018 meeting. This case set out a list of options which, if implemented, could make a positive difference to Air Quality within the study area.

6. There are many sources of roadside nitrogen dioxide, 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.
7. The government set up the Joint Air Quality Unit (JAQU), who have set out the process Local Authorities must follow and are directing this work. JAQU are funding the work that has been justified to them through the submission of final plans for each area.

SCALE OF THE PROBLEM

8. The National Plan was based on the National Pollution Climate Mapping Model.
9. In December 2017, a week long, 24 hour ANPR traffic survey was undertaken within the study area in Fareham. This ANPR 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 via select link analysis, as well as defining the NO₂ concentration modelling. The ANPR data was then fed into an air quality model that modelled human receptors amongst other criteria as specified in JAQU guidance.
10. This approach was advocated so as the findings of the National model could be refined to understand the extent of the local likely exceedance.
11. The data from the ANPR survey also provided important information around the NO₂ source apportionment at the sites with the worst predicted NO₂ exposure. The 2017 source apportionment for the worst predicted receptor (and only likely exceedance in 2020) is shown as Appendix B.
12. In January, 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.
13. Since March officers have been working with consultants towards identifying exactly what the likely exceedance would be and also refining the option or options which will deliver compliance with legal limits in the shortest possible time. The Final Plan will be submitted by 31 December 2018 in line with the requirements of the Ministerial Direction served on Fareham Borough Council.
14. In late September 2018, following JAQU review and subsequent updates to the air quality modelling methodology, the 'do nothing' scenario shifted significantly, indicating that the worst predicted receptor predicting annual average NO₂ exposure of 40.1µg/m³ in 2020.
15. To test the September 2018 prediction of compliance being reached in 2020 with no further action, 2020 was explicitly modelled for the first time, (whereas before it had been interpolated as per JAQU guidance). This further modelling gave slightly higher exposure values than previously interpolated, indicating that the reduction in NO₂ concentration over time is not linear, but instead increases over time, most likely

because of the increasing introduction of vehicles meeting the latest emissions standards (e.g. Euro 6d) in later years.

16. The updated November 2018 air quality modelling now predicts the worst modelled receptor with annual average NO₂ exposure of 40.55µg/m³ in 2020, becoming compliant in a 'do nothing' scenario in 2021. This receptor was located on the A27 where it crosses over Bath Lane in Fareham on Eastern Way. The source apportionment at this receptor is detailed as Appendix B.
17. 2020 is therefore the target year in which the annual average for NO₂ is predicted to marginally exceed legal levels, at one single receptor, with the updated modelling showing the worst predicted exceedance at 40.55µg/m³.
18. 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 of the implementation profile determined during each measure's feasibility study, to understand where measures could be scaled for implementation during 2019.
19. These scaled measures were then modelled to demonstrate their relative benefits, to determine whether annual compliance could be brought forward to 2020.
20. The Council is seeking funding and approval to deliver the full suite of measures that can be implemented in 2019 which are evidenced to contribute likely benefit to local NO₂ exposure to reduce harm to public health as far as possible as quickly as possible. This approach should ensure compliance will be achieved in 2020.

MEASURES

19. In January 2018, the Technical Group were successful in securing £150,000 for an Early Measures Scheme for the replacement of older polluting diesel taxis, unfortunately the grant terms were too stringent and the take up has been low, officers are currently working with JAQU to explore how this scheme can fit with the taxi incentive measure which will form the business case to hopefully improve its take up.
20. 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 Atkins.
21. 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.
22. 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.
23. 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.

24. The original 12 measures were refined down to seven, during the six months since submission of the Strategic Outline Case, with their relative justification / AQ benefit working assumptions being determined.
25. 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.
26. 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

A process was set up for the initial Early Measures funding within the Council's licensing team. Essentially Euro 5 or earlier diesel taxi owners can replace them with a Euro 6 and obtain up to £2450 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 improvements 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

27. The procurement and project delivery plans are currently being finalised for those 4 measures together with the calculation of Air Quality benefits for the specific schemes.

CONSULTATION

28. Once the project had reached stage at which the 12 measures were defined in September the Executive approved the public consultation, 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

29. 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 a 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 will also require 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.
30. The Final Plan is currently being prepared and should be ready for submission 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 may roll, over to early in the new year. Preparatory work on the tendering process is underway with a procurement process ready to commence once funding approvals have been provided by JAQU following final Plan submission and approval.

CONCLUSION

31. The detailed final plan is now being completed and will be submitted before the end of December 2018 in order to fulfil the requirements of the Ministerial Direction and discharge Fareham Borough Council’s responsibilities in that regard. The 4 measures that can be implemented during 2019 which will help ensure compliance in 2020 are detailed below:-
- Final costed measures
 - Procurement and delivery arrangements
 - Monitoring and evaluation
32. Although costings are being finalised, indicative costs of the final measures are shown below.
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| A -Tackling taxi emissions at source | £300,000 |
| C - Walking & Cycling infrastructure | £553,000 |
| E - ITS Review | £ 20,000 |
| G - Bus stop info & RTI | £342,000 |
33. The Final Plan will now be completed and together with all of the supporting evidence be submitted to JAQU for approval and funding, before the end of December 2018. The final plan will contain all of the technical detail and air quality justification of the final measures.

Enquiries: For further information on this report please contact Ian Rickman (ext 4773)