



Report to the Partnership for Urban South Hampshire Overview and Scrutiny Committee

Date: 18 December 2018

Report of: David Hayward, Planning Policy Manager, Havant Borough Council

Subject: PUSH Air Quality Impact Assessment

SUMMARY

The issue of air quality has risen steadily up the national agenda recently. The PUSH Air Quality Impact Assessment has assessed the impact of new development on air quality, both for human health and ecology. The finished report and the data behind it give PUSH authorities a robust evidence base to take forward through Local Plans. Report of 15th October 2018.

RECOMMENDATIONS

It is RECOMMENDED that the Overview and Scrutiny Committee:

1. NOTES the PUSH Air Quality Impact Assessment as part of the collective evidence base to inform future Local Plans and deliver the development proposed in the PUSH Spatial Position Statement;
2. NOTES that air quality is a strategic issue and continued collaborative working amongst PUSH authorities will be needed;
3. NOTES that the PUSH Air Quality Impact Assessment provides a strategic baseline for the purpose of informing future planning policies. It does not necessarily support other local authority functions or regulatory regimes concerning air quality. This includes the Local Air Quality Management regime (Environment Act 1995 Part IV) and duties placed upon authorities to support the UK Plan for Reducing Roadside Nitrogen Dioxide; and
4. NOTES the approach of PUSH authorities continue to work together to address the issue of air quality. It is NOTED that this work is best undertaken by the Planning Officers Group or a working group attached to that group and requires input from officers working in Environmental Health and Public Health to ensure that the wider perspective is taken into account.

INTRODUCTION

1. The issue of air quality has risen up the national agenda recently, culminating with the Government publishing the Draft Clean Air Strategy¹ in May 2018. There are also significant air quality issues at the local level with 21 Air Quality Management Areas designated in the study area, Southampton's designation as a Clean Air Zone and the presence of many European designated nature conservation sites², sensitive to air pollution.
2. The PUSH Air Quality Impact Assessment investigates the impact that the development in the PUSH Spatial Position Statement would have on air quality, both in terms of human health and the sub-region's ecology. The ability to deliver the economic growth and development strategy set out in the PUSH Spatial Position Statement would be threatened without this study. This is due to the fact that Local Plans would be unlikely to be able to proceed if the issue is not addressed in a robust way. This was shown to be true through the recent *Wealden* case law in the South Downs National Park Authority³. Crucially, the outcome of the *Wealden* case was anticipated and responding to it was effectively built into the study from the start.
3. The outcomes of the study and the modelling data behind it will greatly assist PUSH authorities in taking forward Local Plans and meeting their legal requirements under the Habitats Regulations.

PROCUREMENT AND PROJECT MANAGEMENT

4. The need for a PUSH Air Quality Impact Assessment was recognised in November 2016 and Havant Borough Council agreed to project manage the commission. Following a competitive procurement exercise, Ricardo Energy & Environment were commissioned to undertake the work. New Forest District and Isle of Wight pursued separate air quality studies and so are not part of the study area.
5. The report has now been completed and the main report is provided as an appendix together with its appendix 1 (air dispersion model validation). Appendices 2 (Mapped air dispersion model results for human health) and 3 (mapped air dispersion model results for designated sites) show the detailed modelling outputs and will be published on the PUSH website if the Joint Committee approves the recommendations.

METHODOLOGY

6. The broad methodology is outlined in figure 1. This used four scenarios from Sub-Regional Transport Model (SRTM) runs which include the development in the PUSH Spatial Position Statement. These are:
 - a. 2014 reference case
 - b. 2034 without development

¹ <https://consult.defra.gov.uk/environmental-quality/clean-air-strategy-consultation/>

² Special Protection Areas, Special Areas of Conservation and Ramsar Sites.

³ *Wealden District Council v. Secretary of State for Communities and Local Government, Lewes District Council and South Downs National Park Authority* [2017].

- c. 2034 with development and committed transport schemes
 - d. 2034 with committed and uncommitted transport schemes
7. These model results were then inputted into Ricardo's RapidAIR model which is designed to assess air quality changes over large study areas. The model split the 530skm study area into 3m x 3m cells for this analysis.
8. The model then calculates the expected levels of different pollutants in each of the four SRTM model run scenarios:
- a. Nitrogen (NO_x)
 - b. Particulate matter (PM₁₀ & PM_{2.5})
 - c. Ammonia (NH₃)

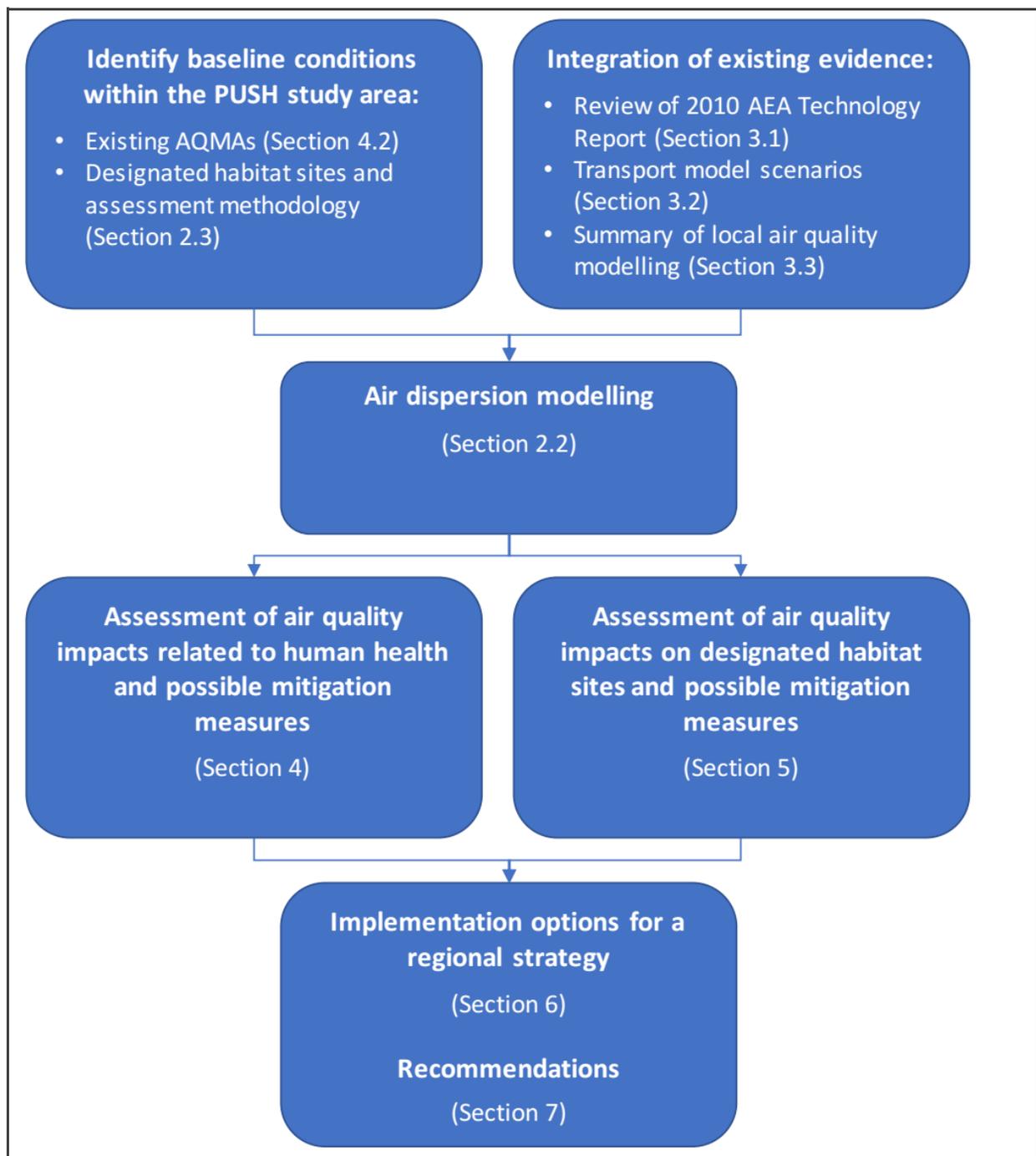


Figure 1: overview of study methodology and sections of the report that address each stage

RESULTS

9. The modelling work shows an improvement in air quality in all of the future year scenarios compared to the 2014 reference case. This reflects the improvement in vehicle efficiency that will take place over the coming years as the vehicle fleet moves towards more efficient engines and alternative fuels.
10. However whilst there is an improvement, there is not an elimination of air quality issues. In 2034, there will still be emissions from vehicles, albeit far less. As well as emissions, particulates are generated from tyre and brake wear which would not be affected by improvements in engine efficiency or the use of alternative fuels.
11. In the 2034 scenarios, there are certain PUSH authorities where there are areas (albeit much smaller than today) where air quality levels will still threaten human health and so where further intervention is needed.
12. In terms of ecological impact, the study sets out those European Sites where it is likely that in 2034, one or more pollutants would exceed the screening thresholds for air quality impact. This narrows down the sites that need examination and the pollutants that would cause it. Through the modelling work, it also gives local authorities a clear understanding of the scale and distribution of impact that needs to be examined through the Habitats Regulations Assessment (HRA) process.

OUTPUTS AND BENEFITS

13. The report will be of obvious use for PUSH authorities in continuing to assess air quality both collectively through PUSH and as individual authorities. However the commission has also produced a significant dataset of the results across the study area at a high resolution (3mx3m pixels) which will be of enormous use beyond the scope of this study.
14. The Wealden case law essentially confirmed that air quality could no longer be looked at individually by local authorities. It has to be looked at collectively, particularly in terms of its impact on ecology. This brings it in line with the other issues that can affect European designated nature conservation sites and have needed cross boundary solutions. The most obvious example is the issue of disturbance from recreation and the Solent Recreation Mitigation Partnership (Bird Aware Solent). By undertaking the study as a partnership, PUSH has greatly reduced the likelihood of legal challenge to partner's local plans as a result and made sure that the approach to air quality reflects all recent case law. Through being one of the first areas of the country to do such a study in this way, we have also continued the trend of PUSH being a vanguard and leading the way nationally in approaching difficult issues.
15. The cost of producing the report and the dataset that sits behind it is considered extremely efficient at £8,258.66 for those authorities wholly within the study area and ~£4,129.33 for those partly within the study area. This once more goes to show the benefits of working together, both for the quality and robustness of the work that has been produced and the cost of producing it.

WHAT FURTHER WORK IS NEEDED?

16. The PUSH Air Quality Impact Assessment provides local authorities in the region with a technically robust and consistent evidence base regarding air quality that will assist in the development Local Plans. It is a significant step forward.
17. However the PUSH study alone does not answer all of the questions. Further local work is likely to be required by all local authorities to look at the particular issues in their area and put in place whatever mitigation measures might be needed. This will be necessary to satisfy the various legal requirements regarding human health and also to be able to undertake an HRA of their Local Plan⁴.
18. Nonetheless, it is also recommended that Local Authorities continue working together on this issues through PUSH to investigate a strategic approach to the issue. Examples already exist of how collaboration can produce an effective approach, including in East and West Sussex. It is recommended that the Planning Officers Group continue to explore cross-boundary solutions to the air quality issues that this study highlights and collaborate with their colleagues in Environmental Health and Public Health to achieve this.

CONCLUSION

19. The PUSH Air Quality Impact Assessment provides a detailed dataset and an excellent base for Local Authorities to continue analysing the air quality issues in their area and the impact that development will have.
20. Nonetheless, it is recommended that local authorities continue to collaborate, through PUSH, to assess what measures might be introduced at a strategic level to address the issue.

RECOMMENDATION

21. It is RECOMMENDED that the Overview and Scrutiny Committee:
 5. NOTE the PUSH Air Quality Impact Assessment as part of the collective evidence base to inform future Local Plans and deliver the development proposed in the PUSH Spatial Position Statement
 6. NOTE that air quality is a strategic issue and continued collaborative working amongst PUSH authorities will be needed
 7. NOTE that the PUSH Air Quality Impact Assessment provides a strategic baseline for the purpose of informing future planning policies. It does not necessarily support other local authority functions or regulatory regimes concerning air quality. This includes the Local Air Quality Management regime (Environment Act 1995 Part IV) and duties placed upon authorities to support the UK Plan for Reducing Roadside Nitrogen Dioxide.

⁴ An HRA is a legal requirement in the Local Plan preparation process. Unless a robust assessment is undertaken, a local plan is not likely to pass through its Examination.

8. NOTE the approach of PUSH authorities continue to work together to address the issue of air quality. It is NOTED that this work is best undertaken by the Planning Officers Group or a working group attached to that group and requires input from officers working in Environmental Health and Public Health to ensure that the wider perspective is taken into account.

Background Papers: PUSH Air Quality Management Study Appendices 2 and 3

Reference Papers: None

Enquiries:

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