

GUILDFORD BOROUGH COUNCIL

NOTE IN RELATION TO ISSUES ARISING AT THE HEARING SESSION ON HRA

1. This short note addresses a number of specific issues raised during the hearing item 15 “Is the plan’s approach towards European designated sites sound (having regard to the latest legal judgments)?” on 3 July 2018. It follows an indication from the Inspector that he would be assisted by a note from GBC on specific points.
2. The note addresses three issues:
 - i. The meaning of an “appropriate assessment”;
 - ii. The justification for allowing for a 2% per annum improvement in NO_x concentrations and nitrogen deposition rates when undertaking air quality modelling;
 - iii. The approach to “diffuse air pollution”
3. The note has had input from the authors of the Council’s HRA, AECOM.

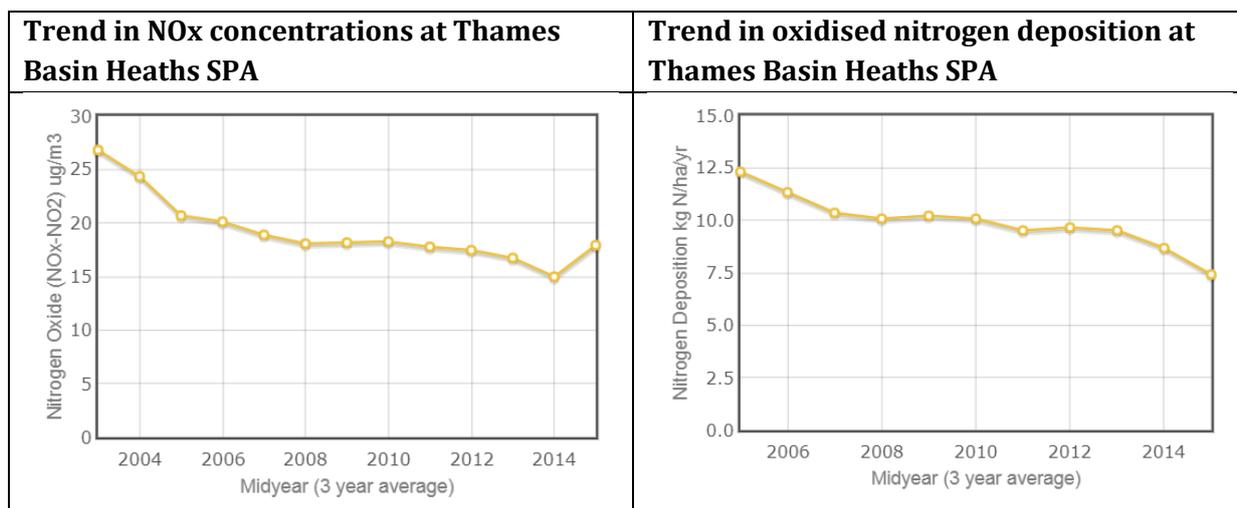
Appropriate Assessment

4. During the hearing session, GBC explained that an “appropriate assessment” of the plan’s impact on European sites had been undertaken and the assessment was ‘appropriate’ to the plan-making, strategic context with which it was concerned.
5. The proposition that what will be required by an appropriate assessment is context-dependent is supported by ***R (Champion) v North Norfolk District Council and another [2015] UKSC 52***. In that case the Supreme Court explained what is meant by “appropriate assessment” in the context of an individual project:

“All that is required is that, in a case where the authority has found there to be a risk of significant adverse effects to a protected site, there should be an “appropriate assessment”. “Appropriate” is not a technical term. It indicates no more than that the assessment should be appropriate to the task in hand: that task being to satisfy the responsible authority that the project “will not adversely affect the integrity of the site concerned” taking account of the matters set in the article.” (emphasis added)
6. GBC strongly submits that the appropriate assessment is appropriate to the task in hand: namely satisfying the competent authority that the plan – through its policies and allocations – will not adversely affect the integrity of the relevant European Sites.

The justification for allowing for a 2% per annum improvement in NOx concentrations and nitrogen deposition rates when undertaking air quality modelling

7. The general long-term trend for NOx has been one of improvement (particularly since 1990) despite an increase in vehicles on the roads¹. Total nitrogen deposition² to the UK decreased by 13% between 1988 and 2008, while NOx concentrations decreased by 50% over the same time period³.



8. The graphs above are taken from the Air Pollution Information System (www.apis.ac.uk) and relate to the 5km grid square within which the Ockham and Wisley Commons part of the Thames Basin Heaths SPA is situated. They show that both NOx concentrations and oxidised nitrogen deposition rates fell considerably over the 10 years from 2005 to 2015. Average NOx concentrations across the area fell from 27 $\mu\text{g m}^{-3}$ in 2005 to 18 $\mu\text{g m}^{-3}$ in 2015, while oxidised nitrogen deposition rates fell from 12.3 kgN/ha/yr in 2005 to 7.4 kgN/ha/yr in 2015. This is an annual average rate of improvement equivalent to 3% of the starting concentration for NOx and 4% for oxidised nitrogen deposition. This reduction occurred notwithstanding traffic growth over the same time period and is most likely attributable to improvements in emissions technology. This improving trend can be expected to continue as further improvements in vehicle emissions technology are introduced. For example, the latest (Euro6/VI) emissions standard only became mandatory in 2015.

9. The Design Manual for Roads and Bridges guidance for air quality assessment (document HA207/07)⁴ recommends reducing nitrogen deposition rates by 2% each year between the base year and assessment year (*The total average deposition rates*

¹ Emissions of nitrogen oxides fell by 69% between 1970 and 2015. Source: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/579200/Emissions_airpollutants_statisticalrelease_2016_final.pdf [accessed 04/07/18]

² Oxidised nitrogen derives from combustion, such as vehicle exhausts, while reduced nitrogen results from ammonia primarily from agriculture. Total nitrogen deposition is both oxidised and reduced nitrogen combined.

³ Rowe EC, Jones L, Stevens CJ, Vieno M, Dore AJ, Hall J, Sutton M, Mills G, Evans CD, Helliwell RC, Britton AJ, Mitchell RJ, Caporn SJ, Dise NB, Field C & Emmett BA (2014) Measures to evaluate benefits to UK semi-natural habitats of reductions in nitrogen deposition. Final report on REBEND project (Defra AQ0823; CEH NEC04307)

⁴ <http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol11/section3/ha20707.pdf>

obtained from the Air Pollution Information System ... should be reduced by 2% per year to estimate deposition rates for the assessment years). It can be seen that this would be broadly in line with recorded improvements within the Thames Basin Heaths area.

10. It should be noted that no specific allowance is made in the modelling undertaken to support the Local Plan to the UK Government's recent decision to ban the sale of new petrol and diesel vehicles from 2040 since it would not affect the time period under consideration, but that announcement illustrates the general long-term direction of travel for roadside air quality in the UK and underlines that allowing for improvements in both vehicle emissions factors and background rates of deposition over long timescales is both appropriate and realistic.

Diffuse Air Pollution

11. Air pollution can have effects on a local level (e.g. increasing nitrogen deposition within 200m of a given road) and on a regional level (i.e. making a very small addition to cumulative UK or Europe wide levels of a particular pollutant, known as the background concentration). This latter was termed 'diffuse pollution' in the HRA. It isn't possible to separate out the small incremental contribution that Guildford Local Plan may make to background air quality across the region (i.e. the UK) and then relate that small increment back to a specific European site, so an assessment of 'diffuse air pollution' cannot be undertaken.
12. *However*, we can confirm that when the local air quality impact assessment was undertaken for the Guildford Local Plan HRA, background air quality was included within the data used in the modelling and the 'in combination' assessment of local nitrogen deposition included both the local road contribution and the background deposition.

11 July 2018