

**Single Issue Review of Core Strategy Policy CS7
Examination**

Friday 29 September 2017, 9.00am

**Matter 6 – The effects of the new housing and the traffic
generated by it on European Sites**

Forest Heath District Council's Hearing Statement

Matter 6 The effects of the new housing and the traffic generated by it on European Sites

We draw to attention the High Court judgement in Wealden District Council v Secretary of State for Communities and Local Government, Lewes District Council and the South Downs National Park Authority [2017] EWHC 351 (Admin) dated 20 March 2017.

6.1 Does the Habitats Regulations Assessment ('the HRA') assess likely significant effects of the housing set out in Policy CS7 in combination with all other relevant plans and projects? If so:

a) Are these the plans and projects listed in Appendix 1 of the HRA?

Response

6.1.1 Yes, this is correct. The exception to this is in relation to the air quality in-combination effects as discussed in 6.3 below

b) Has this been done at the screening stage – as Table 1.1 of the HRA indicates? If not, why not?

Response

6.1.2 Yes, the *review of other plans and projects for 'in combination' effects* is set out in section 3.21-3.32 of the HRA of the Single Issue Review Proposed Submission of Forest Heath Core Strategy Policy CS7 Overall Housing Provision and Distribution (Regulation 19 stage) (CD: C5). The review of plans and projects is in Appendix 1 and the conclusions are set out in sections 3.31 – 3.32.

6.1.3 Within the supplementary Air Quality Report, February 2017 (CD: C15), further information on air quality in-combination effects is presented within the air quality calculations tables and discussion (pages 4 - 11).

c) Have the effects of development in the adopted Forest Heath Core Strategy been taken into account at the screening stage?

Response

6.1.4 Yes, the HRA for the SIR (CD: C5) considered the effects of development in the FHDC Core Strategy (CD: B57) at the screening stage. Whilst the growth in the SIR CS7 is housing, the information used in the assessment of air quality effects was the cumulative traffic information (Forest Heath District Council Site Allocation Plan Cumulative Impact Study CD: B18 and the subsequent Addendum B17) which includes all the development in the FHDC Core Strategy. This was the best available information about traffic growth likely to occur as a result of the development in the SIR. The relevant information and assumptions made in the initial assessment of air quality are presented in sections 4.83 - 4.97 of the main HRA report. This includes a discussion of the limitations of the assessment approach and how these were overcome at this stage.

6.1.5 For the Air Quality Report, February 2017 (CD: C15) the same traffic model (from the cumulative traffic information) was the basis to generate the more accurate traffic data used for the air quality modelling and therefore the traffic growth associated with the adopted FHDC CS is included. See section 6.3a

6.1.6 An analysis of the adopted Forest Heath Core Strategy and its accompanying HRA is not listed in the 'other plans' in Appendix 1. To make the HRA complete, the FHDC Core Strategy will be included in Appendix 1 in the same format as the other included plans in the further iteration of the HRA at the modification stage.

d) What approach has been taken to the consideration of in-combination effects? Has the arithmetic of the sort discussed by Mr Justice Jay in the aforementioned High Court judgement been undertaken – that is to say, have any effects caused by all other relevant plans and projects, though maybe not amounting to likely significant adverse effects in themselves, been added to the effects of the housing set out in Policy CS7?

Response

6.1.7 The methodology for the in-combination assessment of plans and projects is set out in section 3.24 – 3.30 of the HRA of the SIR (CD: C5). Whilst the HRA seeks to determine whether any minor effects of other plans and projects could combine with minor effects to become significant, the nature of the effects being considered does not generally lend itself to a quantitative approach, traffic growth and air quality effects being a notable exception (as addressed under Matter 6.3a).

6.1.8 The arithmetic of the sort discussed by Mr Justice Jay in the aforementioned High Court judgement is reliant on traffic numbers in the AADT format to be presented in the relevant plan/project HRA's to enable this particular approach to in-combination assessment. The limitations of the traffic growth information available to inform the main HRA Report dated 6 January 2017 meant that it was not possible to draw firm conclusions about likely significant air quality effects at that time, either alone or in combination, and such effects were therefore screened in on a precautionary basis, pending the results of the further work discussed below in 6.2 and 6.3.

6.2 The HRA concludes that in relation to potential air quality, likely significant effects on Breckland SAC, Breckland SPA and Rex Graham Reserve SAC cannot be ruled out without further traffic modelling and air quality assessment work. To this end, work has been undertaken by AECOM and is presented in its report dated February 2017.

a) In effect, does the AECOM report represent part of the HRA's screening process and appropriate assessment?

Response

6.2.1 Yes, the AECOM air quality report (CD: C15) forms part of the Habitat Regulations Assessment.

b) What precisely are the potential adverse effects of nitrogen oxides in relation to the qualifying features of the SPA and the two SACs? To put it more simply, what are the possible problems that nitrogen oxides could cause for the natural habitats and/or species concerned? How sensitive are these natural habitats and/or species to atmospheric and/or deposited nitrogen oxides?

Response

6.2.2 When NO_x is emitted from vehicles a proportion is deposited at the roadside as nitrogen. Nitrogen is a fertiliser. Broadly speaking, when atmospheric Nitrogen deposition adds nutrients to low-nutrient ecosystems, this favours a few plant species within any given vegetation community at the expense of the other species present, resulting in a change in the characteristic species assemblage, and often a decline in the overall species richness of the plant habitat, with potential knock-on effects on the fauna supported by those plant habitats. The negative impacts include: loss of sensitive species, changes to habitat structure and function, the homogenisation of vegetation types, changes in soil chemistry, and an increased sensitivity to abiotic and biotic stresses (such as pests and climate). [source: Atmospheric Nitrogen Theme Plan, Natural England et al, 2015].

6.2.3 Heathland and calcareous grassland habitats are thus potentially vulnerable to excessive nitrogen deposition. Where those habitats also support SPA birds, nitrogen deposition can (if in large quantities) change the structure of the heathland to such an extent that it is potentially less likely to support those birds (e.g. by increasing scrub encroachment). The situation of Breckland SPA is complex because much of the SPA consists not of heathland but of arable land or plantation. In order to be suitable for nesting stone curlew (arable land) or woodlark and nightjar (plantation) both these habitats require extensive human manipulation that will have a much greater effect on habitat structure than would arise from nitrogen deposition.

6.3 Does the AECOM report assess likely significant effects of the increase in traffic brought about by the housing set out in Policy CS7 in combination with all other relevant plans and projects? If so:

a) What plans and projects? While we note the reference to "other Local Plans etc" in footnote 8, the report is not clear on this point.

Response

6.3.1 Points 6.3 a) to d) are essentially asking the same question, namely is the modelling undertaken 'in combination' with other plans and projects (rather than for Forest Heath in isolation) and if so how was it done.

- 6.3.2 The model used for the AECOM report does take growth in surrounding local authorities (i.e. growth 'in combination' with Policy CS7) into account because of the way future vehicular flows are calculated. Changes in vehicle flows from other authorities are calculated using the National Trip End Model Presentation Program (TEMPRO), which is an industry standard database tool. TEMPRO draws upon data for each local authority district in the UK (broken down to Middle-Layer Super Output Area) regarding changes in population, households, workforce and employment (in addition to data such as car ownership), to produce a growth factor that is applied to the measured flows to 'grow' them to the end of the plan period. So growth across the whole UK is built into TEMPRO in some form and the TEMPRO results are the basis of the Do Minimum ('2031 Base') scenario. The housing growth set out in Policy CS7 was deducted from the housing assumptions provided in TEMPRO for Forest Heath District Council area using the alternative assumption tool. It was then manually added back into the highway network within Forest Heath District to create the Do Something ('Scenario 1 2031') scenario. The 'in combination' scenario is therefore the Do Something column ('Scenario 1 2031'), as this includes existing traffic, all future journeys due to Policy CS7 (from AECOM's model) and future traffic arising from all other authorities (based on TEMPRO).
- 6.3.3 The fundamental difference between AECOM's February 2017 report and the assessment on which the Wealden judgement was made is that Lewes District only modelled flows arising from Lewes District itself (without considering growth from other areas using TEMPRO or any other method) and then did no air quality modelling at all, using the flow data alone to dismiss the need for further analysis.

b) Have traffic flows from development in the adopted Forest Heath Core Strategy been taken into account in the traffic modelling results, including the table on page 4?

Response

- 6.3.4 Yes they have. All growth to 2031 has been included in the Do Something scenario ('Scenario 1 2031') either as part of the base flows (developments already completed and contributing traffic to the road network), as part of the Do Minimum flows or modelled specifically for the Do Something scenario.

c) Do the traffic modelling results take into account traffic flows from all other relevant plans and projects? Has the arithmetic of the sort discussed by Mr Justice Jay in the aforementioned High Court judgement been undertaken – that is to say, have the traffic flows caused by all other relevant plans and projects, whether or not in themselves exceeding the 1,000 AADT 'threshold' indicated in the Design Manual for Roads and Bridges, been added to the traffic flows from the housing set out in Policy CS7?

Response

- 6.3.5 Yes they do due to the manner in which future flows are calculated for each scenario ('2031 Base' and 'Scenario 1 2031'). Growth in other authorities is included through TEMPRO as mentioned earlier. TEMPRO does not discriminate between authorities that may result in changes of more than 1,000 AADT and those that may result in changes of less than 1,000 AADT.
- 6.3.6 The Wealden judgment essentially means that a change in flows of less than 1,000 AADT due to a given Local Plan cannot now be used as the sole reason for dismissing air quality effects from a given road link, without risk of legal challenge. This is relevant to our analysis in as much as there were five modelled road links where the change in flows due to Local Plan growth was below 1,000 AADT and therefore, in line with normal practice prior to this judgment that the Local Plan would have a neutral effect. Review of the nature of the European site adjacent to those links indicated that the conclusions for the links that were modelled would also apply to the five that were not, particularly since (by definition) the contribution of the Local Plan on those links is much smaller than that of the links that were assessed. The habitat close to the road is generally not suitable for SPA birds, and/or is managed in a way that will over-ride the role of atmospheric nitrogen deposition and, above all, air quality is expected to improve over the Local Plan period even allowing for the Local Plan growth.
- 6.3.7 In light of this and for completeness, the February 2017 report will nonetheless be updated to include additional air quality modelling of those links that were originally dismissed because the change in flows due to the plan was less than 1,000 AADT. This additional work is for completeness and is not expected to change the assessment since by definition the impact of the plan on these links will be less than the links that have already been assessed and concluded to have no likely significant effects.

d) Do the air quality calculations take into account traffic flows from all other relevant plans and projects? Have the concentrations of nitrogen oxide resulting from traffic flows caused by all other relevant plans and projects, whether or not in themselves exceeding 1% of the long-term benchmark (or Critical Load) as indicated in the AQTAG guidance, been added to the concentrations of nitrogen oxide resulting from traffic flows from the housing set out in Policy CS7?

Response

- 6.3.8 Yes, the air quality analysis (pages 4-11) examines the changes in air quality that would occur as a result of all traffic flows from all other relevant plans and projects (via the traffic modelling) and as a result of other changes in background NO_x and nitrogen deposition over the period to 2031. The 'Scenario 1 2031' air quality is the 'total' air quality expected by 2031.
- 6.4 Has Natural England confirmed that the information set out in the HRA and the AECOM report is sufficient and that the conclusions drawn in both are supported?**

Response

6.4.1 NE's representation in relation to the SIR are dated 13 March 2017. In relation to air quality NE commented that:

"Air quality: We have reviewed the Forest Heath Local Plan Air Quality Assessment Regarding Breckland Special Area of Conservation and Breckland Special Protection Area and agree with the conclusions regarding potential pollution levels at specific road networks close to these sites. We consider that the information provided is sufficient to rule out effects to the integrity of Breckland SPA and Breckland SAC at this stage."

6.4.2 These comments precede the High Court ruling, however subsequent to this the Council has agreed a statement of common ground with Natural England (SoCG2: Natural England) where they confirm they are fully satisfied.