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## BY EMAIL ONLY

Dear Mr Kemp

## **Uttlesford District Council Local Plan Examination in Public**

Matter 3, Issue 2, Question 23 (effect on air quality of Hatfield Forest from development on Land North of Taylor's Farm)

Thank you for bringing to our attention the position of Uttlesford District Council, as set out in their hearing statement (available on the examination website), in particular the addendum to the AECOM air quality assessment included in Appendix 2 to that document, notification of which was received by Natural England on 02 June 2025.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

## Natural England response to AECOM AQ Addendum re Land North of Taylor's Farm

Following sight of AECOM's Addendum to the Interim Air Quality Assessment, in Appendix 2 of the Council's matter statement, Natural England's advice **remains unchanged** that there will be a significant adverse air quality impact on Hatfield Forest from ammonia, nitrogen deposition and acid deposition. **Our challenge of soundness to the Local Plan stands.** 

Hatfield Forest SSSI currently exceeds the critical levels (CLes) and critical loads (CLs) for nitrogen deposition, acid deposition and ammonia concentrations. As is noted on <u>Site Pressures</u>, air pollution has been noted as a high risk potential pressure for the site, with motor vehicles noted as one of the sources. It is noted that the features impacted by the pressure are Lowland dry acid grassland (U1b,c,d,f), Lowland fens, including basin, flood-plain, open water transition and valley fens, Lowland mixed deciduous woodland, Lowland neutral grassland (MG5), Lowland neutral grassland (MG8), and Lowland wet neutral grassland (MG11, MG13).

Critical Loads and Critical Levels are set at low values of pollution, as evidence indicates that effects can and do occur at these low levels. This is based on observed changes to species composition in the field – mostly based on experimental evidence from the UK, with corroborative evidence from other European countries. Such effects occur especially to non-vascular plants such as bryophytes and lichens which are extremely sensitive to changes in nutrients, and also to low concentrations of pollutants (especially ammonia) in the atmosphere. The modelled exceedances are a relevant consideration but only in terms of whether the additional pollution would increase the risk of harm to the site. However, this is required to be considered on a case-by-case basis, having regard to the affected ecosystems, ecological features and pollution climate in the area. Where background deposition loads or concentration levels are over the CL or CLe for a given habitat, the addition of further emissions will necessarily be limited to avoid exacerbating the impact to the ecosystem caused by the background.

We note and welcome that the addendum includes further detail on a site specific ecological interpretation of the impacts. However, we are aware that further information has been sought from the National Trust on the specific habitats in the areas to be impacted. We are unclear as to whether the existing site exceedance or the noted air pollution pressure of the site has been factored into this interpretation. The answers to our previous questions additionally imply that the quoted areas impacted, i.e. approximately 30 ha of the site, relate to the impact from the Local Plan alone and do not reflect the cumulative impacts which are likely to cover larger areas of habitat.

The information so far provided within the ecological assessment states that effects will be "*relatively subtle* (*e.g. a change in species richness, percentage grass cover, or shift to more competitive species in the affected area) rather than wholesale habitat damage*". Natural England advise that these effects over approximately 30 ha of Hatfield Forest SSSI for the Local Plan alone, are considered to be damaging effects and cannot be considered to be "not significant".

Natural England concurs that some air quality impacts will reduce over time as there is a larger uptake of electric vehicles. However, this should be considered against the retardation of restoration measures on the site. We welcome the additional information on the amount of time nitrogen deposition impacts from the Local Plan cumulatively would retard restoration but advise that this is a longer period of time than is considered acceptable. Additionally, as ammonia levels do not have a dependable downward trend over time, impacts from ammonia concentrations cannot be considered against retardation.

Ammonia is a particular concern from the allocation site as lichens and bryophytes are noted on the Hatfield Forest SSSI citation. Comments on woodland management and other factors in the ecological assessment do not take account of the bryophyte and lichen assemblage on site. As well as contributing to nitrogen deposition, ammonia has a direct toxic effect on lichens and bryophytes from concentrations in the air. The allocation at Taylor's Farm would very significantly increase HDVs movements on the B-road in close proximity to Hatfield Forest SSSI. Even taking out the uncertainties with regard to modelling transport improvements past 2030, HDVs in particular are likely to be a significant source of ammonia into the future.

We are aware that there is evidence of elevated emissions of NH3 from larger HDVs as a result of ammonia slip (excess NH3 that is present in exhaust or left over from SCR system) – (Ricardo 2020). This has also been seen in road vehicles with catalytic convertors as they age, including hybrid vehicles. It is only when vehicles are fully electric that ammonia is not emitted. In 2021, the previous UK government set out a timeline for all new HDVs sold in the UK to be zero-emission by 2040. However, there is considerable uncertainty regarding the likelihood of meeting that deadline, with fundamental issues such as higher cost of electric HDVs, sufficient fast charging stations to remove range anxiety, current driver licence limits re freight weight/extra weight of batteries, and the need for substantial investment by the government and freight industry. The site allocation at Taylor's Farm would result in significant Ammonia emissions for a minimum of 15 years, though actually for far longer, as it is unlikely that the entire fleet operating out of the site would convert to fully electric HDVs by 2040. Existing diesel-powered HDVs would continue to make a significant number of daily trips to and from the site.

As noted in our response dated 14 May to the Inspector's matters, issue and questions, there are options to avoid or reduce negative impacts to Hatfield Forest SSSI from AQ impacts. One such would be for the access to the site to be changed to avoid the B1256 and instead provide direct access onto the A120 to the North or East of the allocation site. This option has previously been suggested by Uttlesford District Council in a discussion with Natural England. There may be residual impacts from movement within the site closest to Hatfield Forest SSSI but there would likely be a

significant reduction that could well bring AQ impacts to levels that fall under the 1% CL/Cle screening threshold. However, this would need to be modelled. Should further modelling be undertaken on an alternative access, we would be happy to provide additional advice when results are available.

Uttlesford District Council, in discussion with Natural England, indicated that the LPA has a potential alternative site in reserve as an employment allocation, should the Land North of Taylor's Farm not be suitable, to ensure that the appropriate level of employment land can nonetheless be delivered by the new Local Plan. Depending on the location of the alternative employment site, this could remove all potential negative air pollution effects on Hatfield Forest and negate Natural England's current objection to the soundness of the Local Plan.

Natural England would be pleased to provide written answers to any further questions that the Planning Inspectors may have as the Examination in Public progresses regarding air pollution impacts on Hatfield Forest.

For any queries regarding this letter, please send your correspondences to <u>consultations@naturalengland.org.uk</u>.

Yours sincerely

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