

APP/20/00833 | Erection of a flexible power generation facility with associated ancillary infrastructure, access and boundary treatment | Power Generation Facility, Southmoor Lane, Havant, PO9 1JW 20.1213

Thank you for consulting me on this application, and the recently amended Air Quality Assessment (Redmore, November 2020).

Firstly, I am not an air quality expert and am not sufficiently competent with the assessment methodology to undertake my own analysis. I am therefore reliant on the information submitted by the applicant to a great degree. The information below is my own view based on my admittedly limited understanding of these complex issues.

The AQA concludes that there will be an exceedance of 24-hour mean NO_x concentrations at receptor 5, an area of mudflat situated within the tidal creek c.200m to the west. There will also be an exceedance of the 10% Predicted NO_x Concentration (PC) threshold at receptor 18, an area of intertidal habitat within the northern edge of Chichester & Langstone Harbours SPA/Ramsar, Langstone Harbour SSSI and Solent Maritime SAC situated c.600m south-west. There are existing exceedances at a number of the ecological receptors, although for the purposes of assessing the effects of the proposal alone any additional exceedances must normally be considered alone, i.e. the baseline levels are relevant context but do not negate any further exceedances resulting from the proposal.

At ecological receptor 5 the mudflat habitat is not situated within any designated site. It is identified as the Priority Habitat 'intertidal mudflat' using Hampshire Biodiversity Information Centre (HBIC) mapping. The mapped extent of this habitat reaches north from the harbour to a footbridge across the creek, beyond which there appears to be a weir and a transition to a more freshwater system. It should be acknowledged that the priority habitat mapping is based on a review of aerial photography rather than ground truthing and may not be entirely accurate with respect to habitat extent. In any case, it appears that there is priority mudflat habitat present within the creek and that this falls within the identified exceedance zone.

Estimating the potential effects of any increased NO_x exceedance on this habitat are difficult to assess. This is due to the fact that there are no published nitrogen deposition critical loads or levels for mudflats. As with the submitted AQA, in the absence of published loads and levels, assessments have to utilise the best-fit habitat type which in this case is 'saltmarsh', or also the broad distinction between 'forest' and 'grassland'. The issue here is that unlike mudflats, saltmarsh is a predominantly vegetated habitat and therefore potential effects of nitrogen are more easily predicted (increased nutrients affecting plant growth) and potentially more profound. It has been argued (in other assessments submitted within Havant Borough, including for the Pre-submission Local Plan 2036) that the dynamic tidal processes affecting mudflats are likely to negate the effects of nitrogen deposition, with depositions being washed away and dissipated during inundation, and therefore effects are viewed as not significant. In addition, the largely unvegetated nature of mudflats (although marine grasses and algae are present) means that effects on vegetation are less likely to occur. Given that most AQAs seem to conclude that mudflats do not suffer effects from nitrogen deposition, and in the absence of key critical loads and levels, it seems reasonable to conclude that effects would be not significant.

For ecological receptor 18 (Chichester & Langstone Harbours SPA/Ramsar, Langstone Harbour SSSI and Solent Maritime SAC) the issue is the exceedance of the 10% threshold for nitrogen concentration. The figure provided is 10.7%, an exceedance of 0.7%. It is noted that despite the 10% threshold exceedance the overall critical level of 75µg/m³ is not exceeded (the given value is 70.77) and it is concluded that there will not be a significant effect. Based on the assessment criteria used I would concur with this conclusion.

For nitrogen deposition and acid deposition the submitted AQA concludes effects as not significant and I see no reason to doubt this.

If you have any queries please don't hesitate to contact me.

Kind regards,

Tristan

Tristan Norton

**Senior Ecologist
Ecology Team**