SOC 26

4. **PINS 105 SWFOE2**

Outline Statement of objections to the proposed Stansted Airport/M11 Access improvements, in association with the application for a Second Runway at Stansted Airport : -from Saffron Walden & District Friends of the Earth.

General comments.

. Our main concerns are with the effects of the increase in traffic on the air quality in the area.

It is clear that the M11 junction improvements are essential to G2 in order to allow sufficient surface access by road to an expanded airport .

The evidence we shall be putting forward is based on the Environmental Assessment (EA) of the proposals that relate to **Air Quality.**

1. The description of the **legislative and policy framework** in paras 5.4 to 5.13 of the EA do not provide an accurate representation of the present position with regard to Limit Values for vegetation. Neither the EU Directive1996/62.EC nor the present Draft Directive, or the 2007 UK Air Quality Regulations make any specific referrals to exclusion zones within 5 Kms of a motorway. There is only a reference to an exemption to the obligation to set up a series of sampling points for the measurement of pollutants. These need not be set up within 20Kms of areas with a population of over 250,000 or within 5 Kms of a motorway or Part A industrial processes. This leaves member states the discretion to consider pollution effects within these areas. The UK has not taken any statutory measures to deal with such situations. The 2007 Air Quality Strategy has expressed the view that the 5 Km distance limit would apply to air quality limit values for vegetation but, at the same time refers to Defra's intention of ensuring that 95% of all SSSIs have a satisfactory air quality by 2010. It is reasonable to assume that an SSSI of the National status of Hatfield Forest would be amongst the Government's priority list for protection from pollution.

2. **The methodology** used to create the model for predicting the contribution of pollutants from the Scheme to local air quality does not meet the standards of the recent Project for the Sustainable Development of Heathrow (PSDH) which considered in detail what was necessary for a proper validation of any model, in this case ADMS Roads.. The strong recommendation is made that the validation of the model should be made against a year of real time monitoring and that for NOx and NO2 undue reliance should not be placed on nitrogen diffusion tubes, but rather on a sufficient number of continuous analysers. It appears that this assessment included only the UDC Takeley continuous analyser results and relied on calculating a bias adjustment for the diffusion tubes through co-location and using banks of three at sites. The time span was only 6 months necessitating further calculations to deliver an annual mean.

There is a considerable difference between some modelled and monitored results for NO2, but the comparison is complicated by the fact that the monitoring sites are not all the same as the sensitive receptor sites used for the predictions. However it is difficult to believe that differences could be so great in nearby sites and this does not support the conclusion that the model was performing adequately.

Background levels for NOx had to be adjusted in the modelling for G2 because of discrepancies between monitored and modelled results. This was blamed by BAA on the local Defra background levels , an assumption not accepted by all, but as yet no evidence has been presented to clarify the situation. It is stated in the ES for the G2 application volume 4 that all of the air quality results associated with the M11 junction works have been added onto the G2 predicted values. Can we assume that the NOx background adjustment made by BAA for their own air quality modelling has been included in these air quality predictions? If not, why not?

3. **The monitoring results** (Appendix 5.1 Table 5.3.1), shows that at Start Hill (diffusion tubes, presumably no. 10 in Fig, 5.1) the bias adjusted NO2 annual mean in 2006 was 50.1μgms/m3, well over the Limit Value for human health. Not so far along Start Hill there are dwelling houses. Yet no further sampling has been recommended and, Limit values for human health are not constrained by so-called "exclusion zones" .Predicted values for these nearby houses for 2015 and 2030 are not given. It would appear that they will be exceeded contrary to the UK 2007 Regulations.

4. **The predictions for NO2 in 2015 and 2030 with and without the Scheme rely on sensitive receptor sites which do not all relate to the monitoring sites.** It would appear that the new positions of the exits and entrances to the M11 may have relieved the pollution in Start Hill, but since there is no direct comparison of many predicted and monitored results we find it difficult to accept that, for example, the predicted receptor sites 16 and 17 modelled values for NO2 in 2006 are 32.85 and 26.09 μgms/m3 when not too far away Start Hill monitor records 51.2. Figure 5.31. in Appendix 5.1 shows the scatter. These results support our view that the only satisfactory way to validate the model is to follow the PSDH recommendations and use a sufficient number of continuous analysers. Predictions for all the houses along Start Hill should be .modelled.for 2015 and 2030 since this is a matter of concern relating to human health.

5. **We also find it extraordinary that no NOx monitoring was undertaken in or near Hatfield Forest SSSI.** Neither is it included as a sensitive receptor site. We are told that the additional NOx emissions relating to the scheme would be 30,303 tonnes per annum in 2015 and 33, 103 in 2030. Since there is no receptor site in the Forest we do not know what the rise in NOx values will be. Since the Limit Value for vegetation for G2 in 2015 and 2030 will be exceeded according to the G2 Air Quality predictions we can assume that the exceedance will be even

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greater with the Scheme. **The rise in Nitrogen Deposition will also be greater as will be damage to the ecosystem.**

6. **We cannot therefore accept the conclusions of the HA ES that the impact of the proposed junctions will be negligible.** It is also misleading to offer comparisons of the Base case with and without the Scheme. G2 cannot proceed without satisfactory surface access.

7. We do not consider that making assessments based on the National Society for Clean Air (NSCA) recommendations are applicable in major developments when meeting standards based on legislation are the main objective. Neither should they be used to assess individual small steps in a continuous expansion process.

8. Our conclusion is that the Scheme will not only add to the damage to Hatfield Forest and other vegetation round the airport , - a situation already highlighted in the G2 application, but, in addition to exceeding the EU and UK Limit Values of NOx for vegetation, there is the possibility that NO_2 levels for human health may be exceeded near Start Hill. This needs further investigation.

9. There is also the question of additional pollution of Epping Forest SAC from the increased traffic on the M11, which is fully protected by the EU Habitats Directive and which is already endangered by raised levels of NOx.

We therefore base our objections to these works on the M11 Airport junction will not only add to the damage that will be inflicted on the SSSI and NNR Hatfield Forest before 2015 and 2030 but will further damage Epping forest SAC. In addition it appears that UK NO_2 Limit Values for Human health may be exceeded on Start Hill.

We await a decision as to whether these objections should be incorporated into the main evidence outlined in Statement 1 or presented separately, in which case it is possible that they could be submitted by Saffron Walden Friends of the Earth rather than jointly.