Comment on Habitats Regulations Assessment of the Draft Local Plan – Air Quality Assessment (CC149d)

By Councillor Jacob N. Cook (Greetland & Stainland Ward)

1) The Habitats Regulations Assessment of the Draft Local Plan – Air Quality Assessment, Jan 2022 (CC149d, "the HRA air quality assessment") was commissioned by Calderdale Council following two changes and updates to their traffic model. Para 1.1.4 states, "The updated traffic model has the potential to materially change the results and conclusions of the April 2020 assessment. As such, a fully updated, standalone air quality assessment is required, which incorporates the updates to the traffic model."

2) It is understood that the purpose of the HRA air quality assessment was to detail the potential impacts of the Calderdale Local Plan on the designated sites of the South Pennine Moors Special Area of Conservation (SAC) and South Pennine Moors Phase 2 Special Protection Area (SPA). Conclusions drawn about the impact of the Local Plan on these sites relied on air quality assessments that took data from receptors close to the B6114, Saddleworth Road. This receptor location will be impacted by developments proposed in the Local Plan. However, the road traffic data for the B6114 receptor is incorrect as evidenced in the original version of CC149 (Jun 2021). This anomaly is not corrected in CC149d meaning that the conclusions drawn in CC149d are unsound and cannot be relied upon.

3) The air quality results in this assessment were derived from air quality modelling, for which traffic data were provided to facilitate dispersion modelling of vehicle emissions using CERC's ADMS-Roads v5.0 model (see para. 3.5.12). Traffic data were provided by the project transport consultants (WSP) based on a SATURN transport model for the whole of Calderdale and screened to establish the Affected Road Network (ARN). The traffic data used in the assessment comprised the Annual Average Daily Traffic (AADT) flows, vehicle speeds (km/h) and the percentage of Heavy Duty Vehicles (HDVs) applicable to the ARN in all assessment years, and is presented in Appendix D (see para. 3.5.13).

4) The road traffic data is essential therefore to the production of the air quality results in this and other air quality assessments that form the evidence base of the Local Plan (e.g. CC132, CC151). The traffic data was used in this assessment to develop NOx and NH3 emissions inventory databases. In paragraph 3.5.20 it is made clear that these "emissions database outputs for each respective scenario provided road link-specific pollutant emission rates (g/km/s), which were input to the ADMS-Roads model to enable prediction of road-NOx and road-NH3 concentrations at identified sensitive receptor locations." As such, the road traffic data formed an essential part of the dispersion modelling.

5) As mentioned above, the road traffic data used is NOT shown in CC149d but it was presented in Appendix D in Table D-1 – 2019 Baseline & Model Verification Traffic Data of CC149 (June 2021 version). It has been removed from the most recent version of CC149d. This is important because inspection of the traffic data shows it to be inaccurate. This calls into question the results presented in Appendix D Table D-1 of CC149 which shows magnitude of change in annual mean NOx concentrations of >1% of benchmark (2032).

The traffic data in Appendix D of CC149 (June 2021) lists the AADT for the B6114 (Saddleworth Road), adjacent to several proposed developments in the Local Plan. The figures reported are 1580 and 2660 vehicles per day respectively. Table D-2 – 2032 Future Baseline Traffic Data then predicts the following AADT traffic data figures for the B6114 after fulfilment of the Local Plan; 1869 and 1719 vehicles per day respectively. This predicts an increase in annual average daily traffic flow of 289 vehicles per day in one direction, and yet a decrease in traffic flow of 941 vehicles per day in the opposite direction. There is clearly an error in these figures, since the construction of 600 houses on land off the B6114 cannot cause a reduction in daily traffic flow of this magnitude. This suggests that there are discrepancies in the traffic flow data which is the basis of the air quality results. Given that the atmospheric dispersion modelling relies heavily on the traffic flow data, the calculated air quality figures for this receptor on the B6114 must also be inaccurate. In para 6.1.8 pf CC149d it is made clear that "the modelled receptors predicted to experience an increase in NOx (6% of all modelled receptors), NH3 (13%), and N-deposition (20%) above the 1% significance screening criterion are located adjacent to the M62, A672, A640, A58, and **B6114.**" If the traffic data for receptors close to the B6114 are inaccurate, then this questions the soundness of the air quality results for those and other nearby receptors. It therefore questions the robustness, accuracy and soundness of the overall conclusions made for CC149d.

6) This further highlights specific concerns about the reliability of the Calderdale Strategic Transport Model as the basis for all the air quality modelling that forms the air quality evidence base for the Local Plan. In particular it is of concern that the CSTM represents a base year of 2014, with some elements being from the original version in 2008, and as such it is now out of date and not representative of current conditions. The anomalies in the traffic data that is presented in Appendix D of CC149 for the B6114 receptor is further evidence of this. Why has specific reference to this data been removed from CC149d? It is submitted that the correct traffic flow data for the year 2032 would show increases of more than 1,000 vehicles per day (as Annual Average Daily Traffic (AADT)) for the B6114 site. Although traffic data for the B6112 in West Vale was not considered in the HRA air quality assessment, it is worth noting that traffic flow there would be influenced by proposed developments from a number of new sites as traffic converges there from both Halifax and Elland. I have requested that this traffic flow data for West Vale be made public.

7) As mentioned, the HRA air quality assessment was commissioned by Calderdale Council following two changes and updates to their traffic model. Para 1.1.4 states, “The updated traffic model has the potential to materially change the results and conclusions of the April 2020 assessment. As such, a fully updated, standalone air quality assessment is required, which incorporates the updates to the traffic model.” There is an absence of publicly available information about what those changes to the traffic model were. Given how important they are to the air quality assessment, it is essential that the traffic flow data be published for all sites across Calderdale where that information has been relied upon as part of the Local Plan evidence base.

8) In conclusion, it is clear that there are discrepancies in the traffic flow data used to inform the air quality dispersion modelling results. This questions the soundness of the air quality evidence base of the Local Plan. There has been limited publication of traffic flow data for public scrutiny and given how important this data is, the Council should immediately publish all traffic flow data that has been used to inform air quality assessments in the Local Plan evidence base. Document CC149d is a backward step, because instead of giving more evidence of traffic flow data, it actually removes it. The conclusions drawn in CC149d are therefore unsound and cannot be relied upon.

Councillor Jacob Cook