

**PERRY COURT LOCAL CENTRE, FAVERSHAM: APPLICATION REFERENCE 81/502735/FULL**

**TECHNICAL NOTE: AIR QUALITY RESPONSE TO THE FAVERSHAM SOCIETY 'POLLUTION ASSESSMENT PROJECT: DRAFT REPORT'**

**OCTOBER 2019**

**OUR REF: 24352-04-TN-02**

**Introduction**

Mewies Engineering Consultants Ltd (M-EC) was commissioned to undertake an Air Quality Assessment (AQA) to accompany the planning application (18/502735/FULL) for a local centre development at land off Ashford Road, Faversham.

The AQA (M-EC report references 24352/09-18/6265 Rev A and 24352-04-TN-01) sought to examine the impact of development-related road traffic emissions from the proposed development upon 49 sensitive receptor locations, including the Ospringe Air Quality Management Area (AQMA). The key traffic related pollutants considered were nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM<sub>10</sub>).

The AQA was undertaken with reference to the following relevant EU and UK legislation, policy and guidance:

- European Council Directive 2008/50/EC on ambient air quality and cleaner air for Europe;
- The Air Quality Standards Regulations 2010;
- The National Air Quality Strategy 2007;
- The National Planning Policy Framework 2019;
- MHCLG Planning Practice Guidance;
- Defra statutory guidance, Local Air Quality Management Technical Guidance LAQM.TG(16) (February 2018);
- Environmental Protection UK and the Institute of Air Quality Management 'Land-Use Planning & Development Control: Planning for Air Quality' (January 2017); and
- Environmental Protection UK (EPUK).

The Environment Act 1995 provides a legislative framework for local authorities to undertake a system of Local Air Quality Management (LAQM). LAQM involves the regular assessment of air quality by local authorities and designate AQMAs where UK national air quality objectives and EU limit and target values are not being, or are not likely to be, achieved.

The relevant national air quality objectives to be met in England relate to NO<sub>2</sub> and PM<sub>10</sub>. It is noted that there is not any requirement within LAQM or planning requirements for the assessment of air pollutant concentrations against any other guideline values published by any other body, and no requirement for the assessment of PM<sub>2.5</sub>, beyond working towards reducing emissions and concentrations of this pollutant alongside other air pollutants.

In brief, the AQA concluded that that the proposed development will not lead to significant adverse impact upon air quality within Faversham, and that there is no reason to refuse planning permission on grounds of air quality.

It is understood that no objection in relation to air quality has been received from Swale Borough Council (SBC).

### **THE FAVERSHAM SOCIETY 'POLLUTION ASSESSMENT PROJECT: DRAFT REPORT'**

Since the AQA was submitted, The Faversham Society 'Pollution Assessment Project: Draft Report' (hereinafter referred to as the 'Report'), prepared by the Centre for Health Service Studies (CHSS), University of Kent (August 2019) has been published.

The Report provides a summary of SBC's air pollutant monitoring data (undertaken as part of their LAQM duties), and describes additional air pollutant surveys undertaken by CHSS. The report details the results of the additional surveys, and provides recommendations for potential additional LAQM work within the SBC area.

It is not the purpose of this Technical Note to provide a full review and critique of the Report. However, the following sections of this Note consider findings within the Report, in relation to the proposed development.

#### WHO Guidelines and PM<sub>2.5</sub>

In brief, the Report contains survey results for annual mean NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations within Faversham, and compares the measured concentrations against the national air quality objectives and World Health Organisation (WHO) guideline values.

As stated above, in the context of road traffic emissions from the proposed development, the relevant national air quality objectives relate to NO<sub>2</sub> and PM<sub>10</sub>; there is no requirement for the assessment of PM<sub>2.5</sub>.

In addition, there is no requirement for assessment of air pollutant concentrations with regard to WHO guideline values within either LAQM, or Air Quality Assessment for planning purposes.

The findings within the Report relating to PM<sub>2.5</sub> and WHO guideline values are therefore not relevant in the determination of this planning application and have not been considered further within this Technical Note

#### Ospringe AQMA

With regard to annual mean NO<sub>2</sub> concentrations within the Ospringe AQMA, it is noted that the information shown within Figure 15 of the Report includes an amalgamation of background, local authority measurements and CHSS measurements.

However, CHSS undertook NO<sub>2</sub> monitoring at location Fav\_1 (located within the AQMA adjacent to Ospringe Road, as indicated within Figure 8 of the Report). The information provided within Figures 9, 10, 11 and 12 of the Report shows that annual mean NO<sub>2</sub> concentrations ranged between 32.0 µg/m<sup>3</sup> and 39.1 µg/m<sup>3</sup>, which is below the national air quality objective of 40 µg/m<sup>3</sup>.

In addition, CHSS undertook NO<sub>2</sub> monitoring at location Fav\_2 (also located within the AQMA adjacent to Ospringe Road). The information provided within Figures 9, 10, 11 and 12 of the Report shows that annual mean NO<sub>2</sub> concentrations at this location ranged between 18.0 µg/m<sup>3</sup> and 22.0 µg/m<sup>3</sup>, which is well below the national air quality objective.

#### Potential Exceedances in Other Areas

Regarding annual mean NO<sub>2</sub> concentrations within other areas of Faversham, the Report recommends new AQMAs be designated at East Street and Ashford Road, together with additional LAQM NO<sub>2</sub> monitoring sites. These areas have therefore been considered below, in the context of potential impact from the proposed development.

With regard to East Street, the report details four sets of annual mean NO<sub>2</sub> survey results, ranging between 34.0 µg/m<sup>3</sup> and 41.8 µg/m<sup>3</sup>. It is not clear as to whether exceedance of the annual mean NO<sub>2</sub> objective is considered to have occurred.

However, to provide an indication of the development impact that can be expected at East Street, taking account the distance from the proposed development (1.5km) and the anticipated dispersion of development trips along the road network before it reaches this area, it is considered that development traffic flows will be lower than those assessed nearer to the proposed site within the AQA. The increase in annual mean NO<sub>2</sub> concentrations can therefore be expected to be lower than the highest predicted change of 0.3 µg/m<sup>3</sup> (or 0.6% of the objective) shown within the AQA.

As IAQM/EPUK 'Land-Use Planning & Development Control: Planning for Air Quality' guidance advises that any change of 0.5% or less of the objective can be considered to be Negligible impact, the smaller potential increase in concentrations at East Street are therefore expected to be insignificant, regardless of whether or not the air quality objective is currently exceeded in that area.

With regard to Ashford Road, the Report also contains various annual mean NO<sub>2</sub> results, ranging between 34.2 µg/m<sup>3</sup> and 41.9 µg/m<sup>3</sup>. The diffusion tube monitoring site (FAV\_3) at Ashford Road was located adjacent to the fire station on the northbound approach of the junction. As the air quality objectives are only applicable at locations with relevant exposure (in this case, residential receptors on Ashford Road), M-EC has calculated the annual mean NO<sub>2</sub> concentration at the nearest dwellings to the Ashford Road junction, using Defra's 'NO<sub>2</sub> Fall-off with Distance Calculator' (version 4.2).

This Defra calculator has been developed to assist local authorities to derive NO<sub>2</sub> concentrations at locations with relevant exposure as it is not always possible to measure concentrations at the precise location. The calculator requires information relating to the diffusion tube distance from kerb, distance of receptor from kerb and the measured annual mean NO<sub>2</sub> concentration.

Assuming the monitoring site was 5m from the kerb, taking into account the distance of the nearest dwelling to Ashford Road (20m), a background NO<sub>2</sub> concentration of 11.85 µg/m<sup>3</sup> (informed by Defra's background mapping) and the highest measured annual mean of 41.9 µg/m<sup>3</sup>, the resultant predicted annual mean NO<sub>2</sub> concentration at the nearest sensitive receptor to Ashford Road is 29.5 µg/m<sup>3</sup>.

The resultant concentration of 29.5 µg/m<sup>3</sup> is well below the air quality objective of 40 µg/m<sup>3</sup>. It is therefore considered that any small increase in concentrations as a result of the development will not lead to significant impact upon air quality at this location.

### **Conclusions**

Taking into account the above, it is concluded that the M-EC Air Quality Assessment findings remain valid, specifically that the proposed development will not lead to significant adverse impact upon air quality within the Ospringe AQMA, or East Street or Ashford Road areas.

In turn, it is considered that the development will not lead to additional significant difficulties for SBC in achieving their statutory obligations.

It is also concluded that, although the Faversham Society Report makes reference to the pollutant PM<sub>2.5</sub> and WHO guidelines, they are not relevant to LAQM or the determination of the planning application.

It is therefore considered that there are no reasons to refuse planning permission on grounds of air quality.