Local Plan for Lancaster City Council: Response to comments from CLOUD
April 2019

Experts in air quality management & assessment
Document Control

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**Report Prepared By:**  Dr Clare Beattie

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Air Quality Consultants Ltd
23 Coldharbour Road, Bristol BS6 7JT  Tel: 0117 974 1086
119 Marylebone Road, London NW1 5PU  Tel: 020 3873 4780
aqc@aqconsultants.co.uk

Registered Office: 23 Coldharbour Road, Bristol BS6 7JT
Companies House Registration No: 2814570
1 Introduction

1.1 This note is in response to the Air Quality Hearing Statement written by Rosie Morgan, CLOUD (Citizens of Lancaster Opposed to Unnecessary Development) for matter 7 Environment, and specifically addresses comments relating to the Air Quality Position Statement submitted in support of the Local Plan.

1.2 Comments raised by CLOUD include:

1.2.1 This document... Concludes that as air quality in 2017 has improved slightly in Galgate due to HGVs using the new expressway, there is currently no issues with air quality in Lancaster and that no further assessment is required.

1.2.2 ...a position statement like this could only be potentially adequate if it was in support of a proposed development of 50 residential dwellings or less, not a full scale garden village with well over 1500 residential dwellings...

1.2.3 Often overlooked is the requirement by Natural England for an air quality ecological assessment if a development is likely to impact upon designated habitats.

1.2.4 ...a full air quality assessment is undertaken both operational and ecological. The only possible reason why one was not carried out is because the results could potentially illustrate how adverse the air quality impacts of the BGV could be on local residents.

1.3 The CLOUD statement concludes with a number of requirements for an air quality assessment.

1.4 A response to the comments raised by CLOUD is provided in Section 2 of this note.
2 Response

2.1 In response to the comment outlined in 1.2.1, the Air Quality Position Statement does not conclude that there are currently no issues with air quality in Lancaster and that no further assessment is required. Paragraph 6.1 of the Air Quality Position Statement states that "Monitoring in 2017 has indicated compliance in the Carnforth and Galgate AQMAs, and although it is too early to say whether this will continue, this compliance outcome may be, at least in part, due to traffic changes arising from the opening of the Bay Gateway in October 2016". In addition paragraph 6.2 of the Position Statement clearly states that "Lancaster city centre (gyratory system), has air quality exceedances of a larger magnitude. There are locations which are significantly above the annual mean nitrogen dioxide air quality objective and the 1-hour mean objective may also be breached. In Lancaster, fundamental transport measures, such as those outlined in the Lancaster District Highways and Transport Masterplan, will be required to reduce emissions to a level that would achieve the objectives. The measures required to radically change traffic in Lancaster City Centre will require significant funding...". Paragraph 6.3 further states that "Although it is difficult to decipher a long term downward trend in air quality, largely because expected emissions from new vehicles have not been realised to the extent that was predicted, it appears from data presented in this report that there is a downward trend in more recent years; further data when it becomes available, will be able to confirm this. It is, however, acknowledged that allocations in the Local Plan have the potential to increase traffic both within the AQMAs, and elsewhere."

2.2 Since the publication of the Position Statement, provisional air quality monitoring data for 2018 have become available and have been included in the analysis of trends. These data provide further evidence of a reducing trend, with concentrations remaining below the objectives (and reducing further) in both Galgate and Carnforth. The updated graphs are included in Appendix A2 to this note.

2.3 Air quality issues in Lancaster remain, but appear to be reducing, with fewer sites currently exceeding the nitrogen dioxide annual mean objective. Nonetheless, fundamental transport measures will be required to reduce remaining high concentrations to acceptable levels.

2.4 In response to the comment outlined in 1.2.2, the Position Statement was not meant to provide a detailed air quality assessment of Bailrigg Garden Village, but was intended to represent the first stage in ongoing work to support the local plan process. As such, it sets out baseline air quality conditions in order to provide evidence of where concentrations are above relevant air quality objectives, provides a qualitative review of the allocations in the Local Plan (of which Bailrigg Garden Village is one of the four strategic sites), and includes a qualitative evaluation of potential mitigation options.

2.5 It is agreed that a robust, quantified assessment of developments which may have an air quality impact will need to be undertaken. Local planning decisions can affect local air quality through
their design, location and management of emissions, and this is fully recognised in Lancaster City Council's Low Emissions and Air Quality Guidance for Development (Planning Advisory Note (PAN))\(^1\) published in September 2017. This document sets out how to classify an application and depending on the outcome of this classification, sets out what level of assessment is required. One of the criteria for classification is whether the site impacts on one of the declared AQMAs. The PAN recognises that most sites will have some level of impact and consequently that most sites will require some level of mitigation. Requirements in relation to Electric Vehicle infrastructure, control of construction emissions, on site technology measures and off-site financial contributions are included. The PAN identifies the IAQM and EP UK Planning and Air Quality guidance\(^2\) to provide technical context for assessments, in addition to the technical requirements set out within the PAN.

2.6 In response to the comment outlined in 1.2.3, relating to an air quality ecological assessment, this has been undertaken within the Habitats Regulations Assessment (HRA)\(^3\).

2.7 In response to the comment outlined in 1.2.4, about the need for a full air quality assessment, it is fully recognised that any large scale development will need a detailed assessment, and the policy approach is in place through Lancaster City Council’s Low Emissions and Air Quality Guidance for Development (PAN), which should reduce the likelihood of any air quality issues arising (by addressing them through design and mitigation), or address any residual issues if they arise.

2.8 In response to the requirements for an air quality assessment, the vast majority of the requirements set out by CLOUD are supported, and are included in the EPUK/IAQM Air Quality and Planning Guidance, as well as in Lancaster City Council’s Low Emissions and Air Quality Guidance. As such, these requirements will be addressed in air quality assessments, which will be reviewed by the air quality officer within Lancaster City Council. Although it is agreed that a sensitivity test should be carried out as per IAQM guidance, this should not use 2017/2018 emission factors and background concentrations in future years, as this is not considered a reasonable assumption. Current IAQM position on dealing with uncertainty in vehicle NO\(_x\) emissions within Air Quality Assessments\(^4\) does not identify a specific approach but states that “There are a number of approaches that could be taken, including applying a sensitivity test that assumes NO\(_x\) emissions will not reduce as rapidly as shown by the EFT.”

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\(^1\) See [http://www.lancaster.gov.uk/planning/planning-policy/about-the-local-plan](http://www.lancaster.gov.uk/planning/planning-policy/about-the-local-plan) Scroll down to “Supplementary Planning Documents (SPD)s), Development Briefs and Planning Advisory Notes (PANs)”

\(^2\) Guidance can be found at [http://www.iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf](http://www.iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf)

\(^3\) The HRA can be found at [http://www.lancaster.gov.uk/planning/planning-policy/publication-local-plan](http://www.lancaster.gov.uk/planning/planning-policy/publication-local-plan)

\(^4\) IAQM Position Statement on sensitivity test can be found at: [https://iaqm.co.uk/text/position_statements/uncertainty_vehicle_NOx_emissions.pdf](https://iaqm.co.uk/text/position_statements/uncertainty_vehicle_NOx_emissions.pdf)
3 Summary and Conclusions

3.1 It is agreed that significant air quality issues in Lancaster city remain. Monitoring data, however suggest that air quality is improving, and there have been no exceedances of the annual mean nitrogen dioxide objective in Galgate or Carnforth for the last 2 years.

3.2 The requirement for an air quality assessment for new development is supported, and is being implemented through the Council’s Low Emission and Air Quality Guidance for Development which sets out requirements for both assessment and mitigation.
4 Appendices

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A1 Professional Experience

Stephen Moorcroft, BSc (Hons) MSc DIC MIEenvSc MIAQM CEnv

Mr Moorcroft is a Director of Air Quality Consultants, and has worked for the company since 2004. He has over thirty-five years’ postgraduate experience in environmental sciences. Prior to joining Air Quality Consultants, he was the Managing Director of Casella Stanger, with responsibility for a business employing over 100 staff and a turnover of £12 million. He also acted as the Business Director for Air Quality services, with direct responsibility for a number of major Government projects. He has considerable project management experience associated with Environmental Assessments in relation to a variety of development projects, including power stations, incinerators, road developments and airports, with particular experience related to air quality assessment, monitoring and analysis. He has contributed to the development of air quality management in the UK, and has been closely involved with the LAQM process since its inception. He has given expert evidence to numerous public inquiries, and is frequently invited to present to conferences and seminars. He is a Member of the Institute of Air Quality Management.

Dr Clare Beattie, BSc (Hons) MSc PhD CSci MIEenvSc MIAQM

Dr Beattie is an Associate Director with AQC, with more than 20 years’ relevant experience. She has been involved in air quality management and assessment, and policy formulation in both an academic and consultancy environment. She has prepared air quality review and assessment reports, strategies and action plans for local authorities and has developed guidance documents on air quality management on behalf of central government, local government and NGOs. Dr Beattie has appraised local authority air quality assessments on behalf of the UK governments, and provided support to the Review and Assessment helpdesk. She has also provided support to the integration of air quality considerations into Local Transport Plans and planning policy processes. She has carried out numerous assessments for new residential and commercial developments, including the negotiation of mitigation measures where relevant. She has carried out BREEAM assessments covering air quality for new developments. Clare has worked closely with Defra and has recently managed the Defra Air Quality Grant Appraisal contract over a 4-year period. She is a Member of the Institute of Air Quality Management and is a Chartered Scientist.

Full CVs are available at www.aqconsultants.co.uk.
A2  Updated Graphs Showing Monitoring Data including 2018

Figure 1: Trends at monitoring sites in the Lancaster AQMA
Figure 2: Trends at monitoring sites in the Galgate AQMA
Figure 3: Trends at monitoring sites in the Carnforth AQMA