

# Air Quality and Emissions Planning Guidance

## Templates and Design Options

### Summary

- i This report provides advice and guidance for Lancashire Authorities considering adopting an Air Quality and Low Emissions Planning Approach. It draws upon the corresponding working draft document, which has recently been prepared for Lancaster District Council and provides three associated templates, which represent structured variants of the same.
- ii The templates are designed to allow rapid preparation of a functional working draft guidance. They are also amenable to finer tuning and detailed adjustment. Once drafted, they form the basis for working towards either a local advisory note or more formally as an SPD within the respective Local Development Framework.
- iii The report lays out the common principles and building blocks from which the different templates have been created and also provides a questionnaire to help identify, which of the three provides the most likely starting point for a prospective authority. It finally provides an overview of associated options for fine tuning and advice on specifying detailed emission assessment requirements.
- iv While the templates are provided as ready for use, it should be noted that at this current stage this will result in a working draft document, rather than a complete and final version. This is because work is ongoing to address a small number of remaining development queries, the results of which will be available in due course.

## 1 Introduction

- 1.1 This report provides advice and guidance for Lancashire Authorities considering adopting an Air Quality and Low Emissions Planning Approach. It draws upon the corresponding working draft document, which has recently been prepared for Lancaster District Council and provides three associated templates, which represent structured variants of the same.
- 1.2 Template 3 directly reflects the approach taken by Lancaster; Template 2 provides a similar though more basic version and Template 1 provides a simpler version still. The aim in producing these linked templates is to encourage adoption of a consistent approach across the county, while at the same time providing flexibility to meet the differing needs and circumstances of individual districts.
- 1.3 This accompanying note is written in summary form, and so is best considered in combination with both the Lancaster document and the templates themselves, which provide associated detail and useful illustration. Indeed, the document is primarily designed to provide the basis of a workshop or discussion meeting, and its brevity makes it best suited to such a facilitated environment.
- 1.4 Section 2 identifies common principles, around which consensus is believed largely to exist. Section 3 summarises the important building blocks, from which the different templates have been created and section 4 provides a questionnaire to help identify, which of the three templates provides the most likely starting point for a given authority.
- 1.5 The templates themselves are designed to allow rapid preparation of a functional working draft guidance document. At the minimum, this step requires inputting appropriate dates, titles and basic contextual information. Beyond this, more substantive adjustments may either be required, or simply desired, in order to provide the most suitably tailored local document. Section five provides an overview of associated options for fine tuning. Section six provides advice on specifying the detailed emission assessment methodology.
- 1.6 While the templates are provided as ready for use, it should be noted that at this current stage this will result in a working draft document, rather than a complete and final version. This is because a small number of development issues remain outstanding. It is anticipated that these will be addressed over the next few months (these items are flagged in green highlight throughout the templates) and Lancashire authorities are very much encouraged to play an active role in determining ultimate direction on these refinements.
- 1.7 Once drafted, it is envisaged that, documents based on the templates will ultimately be suitable for adoption as a local advisory note for developers or more formally as an SPD within the respective Local Development Framework. The latter has more teeth, though involves more work and usually a longer lead time. It may also require corresponding amendment to policies within the local plan.
- 1.8 As written, the templates assume that appropriate local plan policies are in place to accommodate the selected approach. However, the Lancaster document provides example wording, which could be adapted and employed, if full alignment has yet to be established.

## 2 Common Principles

### Aims

- 2.1 Encourage developers to support action through the planning system to improve air quality and lower transport emissions. Specifically the approach seeks to:
- minimise harmful pollutant emissions
  - avoid significant impact on local concentrations
  - protect the public from unacceptable exposure.
- 2.2 In doing so it tailors assessment and mitigation requirements according to specific site characteristics, which relate both to the nature and also the scale of associated impacts and risk.

### Scope

- 2.3 Scope of the guidance is defined by pollutants of concern (i.e. PM and NO<sub>x</sub>) and by source (i.e. Transport). At the present time the guidance does not cover boilers or other stationary sources, nor does it cover carbon management. It also assumes that associated requirements for sites falling under other regulatory regimes (including IPPC, LAPPC, waste management licensing and EIA regulations) are specified elsewhere.

### Process

- 2.4 The guidance adopts a three stage process: (i) Classification (of a site in order to streamline its passage through the system, (ii) Mitigation and Assessment (requirements for a given type of site) and (iii) Reports and Decisions (developer submissions and how these will be considered).

### Classification

- 2.5 Classification is designed as a simple process, which can be applied easily and accurately to the majority of sites without requiring significant technical insight. Recognising that some sites require greater judgement than this, flexibility is retained for the LPA to adjust standard classification for the small proportion of less typical sites.

### Mitigation and Assessment

- 2.6 Assessment requirements are determined by the classification process. Accordingly one or more discrete assessments are required with corresponding pass/fail tests to guide interpretation of the results. Standard Emissions mitigation is defined and required for all sites. Further mitigation (if pursued) is required for larger sites and some sites may also require provisions relating to exposure risk or concentration impacts.

### Reports and Decisions

- 2.7 The Developer submits impact evidence and mitigation proposals in line with the associated guidance. The LPA forms an opinion as to site acceptability with regards to air quality. This opinion is then considered as part of the wider planning balance through the determination process.

### 3 Building Blocks

#### Context

- 3.1 Boiler plate text lays out context, aims and general principles. This is largely generic text, though requires updating with authority specific details and references, including underpinning local policy.

#### Classification

- 3.2 A universal system is provided, which can be applied as part of any of the proposed options. Depending on the template it is based on 4 or 6 possible site types (1/1X, 2/2X, optionally 3/3X).

#### Standard Mitigation

- 3.3 Standard (mitigation) provisions apply to all sites, providing relatively simple widely applicable measures to help reduce emissions. They comprise Construction Emissions Management Plan (CEMP) and provision of Electric Vehicle Infrastructure (EV-IS).

#### Further Mitigation

- 3.4 In addition to standard provision, larger sites (Type 2, 2X, 3 and 3X) may be required to design and implement a package of measures termed 'Further Emissions Mitigation'. The broad scope of which comprises: Further Electric Vehicle Infrastructure, Trip Reduction, On-Site Technology Measures and (optionally) Developer Contributions.

#### Assessments

- 3.5 Depending on the nature of the development site, different types of impact assessment are required. These comprise: Emissions Assessment (associated with overall level of pollutant emissions), Concentration Assessment (associated with direct impacts on pollutant concentrations) and Exposure Assessment (associated with risk of human exposure to air pollution).

#### Tests

- 3.6 Site acceptability with regards to air quality is determined by reference to a series of tests. The first considers compliance with the standard mitigation requirements. The remainder correspond independently and respectively to each of the assessment types (Emissions, Concentrations and Exposure).

#### Emissions Assessment Methodology

- 3.7 Broad methodologies are defined as 'AC', 'AB', 'RC' and 'RB' respectively as combinations of:  
Impacts: Aggregated Damage (A) or Sub-Fleet Distance/Mass/Damage Resolved (R)  
Mitigation: Cost-Based Valuation (C) or Benefit-Based Valuation (B)

#### Performance Benchmarking

- 3.8 As a move towards greater consistency and transparency, it is recommended that those pursuing further mitigation supported by emissions assessment, undertake a period of performance benchmarking as a first step towards setting quantitative site performance targets/thresholds.

#### Concentration Impacts

- 3.9 An alternative Low Emission ('backstop') approach is proposed for interpreting concentration assessments. This contrasts with the more traditional ('graduated fine control') approach.

## 4 Design Questionnaire

**Q1. Are you comfortable with the common principles?**

Yes

No => Skip to the end

**Q2. Standard Mitigation applies for all sites.**

**Do you also wish to include further on-site mitigation for larger sites?**

Yes

No => Skip to Q7

**Q3. Do you wish to include the option of developer contributions as part of further mitigation?**

Yes

No

**Q4. Do you wish to use Emissions Assessment to mediate the balance/extent of further mitigation?**

Yes

No => Skip to Q7

**Q5. Which broad emissions assessment methodology would you prefer – AC, AB, RC, RB?**

Impacts: Aggregated Damage (A) or Sub-Fleet / Distance-Mass-Damage Resolved (R)

Mitigation: Cost-based Valuation (C) or Benefit-Based valuation (B)

**Q6. Do you wish to adopt quantitative performance benchmarking for emissions mitigation?**

Yes

No

**Q7. Do you wish to adopt the alternative Low Emission (backstop) approach for interpreting the results of concentration assessment, rather than the traditional (graduated fine control)?**

Yes (use as backstop)

No (use for graduated fine control)

**=> Interpretation Table**

	Header	Your Response <sup>1</sup>	Option 1	Option 2	Option 3
Q1	General Principles <sup>2</sup>		Y	Y	Y
Q2	Further Mitigation		N	Y	Y
Q3	Contributions		-	N	Y
Q4	Emissions Assessment		-	Y	Y
Q5	Emissions Method		-	Var <sup>3</sup>	Var <sup>3</sup>
Q6	Benchmarking		-	Y	Y
Q7	Backstop Control		N	Y	Y

[1] If your answers don't match one of the options please raise/discuss (i.e. other combinations are possible)

[2] If your response to Q1 is No, then it is important to address these concerns/uncertainties first

[3] Templates 2 & 3 include alternative text options to accommodate desired methodology.

## 5 Detail and Fine Tuning

### Classification Terminology

- 5.1 The standard types terminology is preferred, since it avoids confusion with related but different site classifications used more generally within the planning process (e.g. small, medium or large). However, other terminologies could be adopted and the templates could be adjusted accordingly.

### Classification Thresholds

- 5.2 Assuming that the standard 4-way or 6-way classification structure is to be adopted then there are a number of opportunities for tuning the associated criteria to meet local needs, some are required and the rest are optional:

<u>Location</u>	A local map is required that defines 'hatched' and 'plain' zones, according to the potential of development located within them generating traffic which impacts directly on priority areas of poor air quality [required]
<u>Size</u>	Standard size thresholds are provided, which are derived from the old DfT TA/TP guidance. An authority may wish to tune these to local requirements, for example aligning them with their local TA triggers [optional]
<u>Traffic</u>	Standard traffic thresholds are recommendations based on review of existing guidance documents. Again, these can be tuned according to Local preference [optional]
<u>Exposure</u>	Exposure risk definition is based upon national LAQM guidance. It can be tuned, provided the LPA is confident that they have justification for doing so [optional]

### Mitigation Options

- 5.3 Options presented within the Lancaster Guidance provide a comprehensive scope of transport mitigation. However, if further options are identified, they can be added. Alternatively, if a particular option is not considered appropriate it can be deleted.

### EMA Indices

- 5.4 Proposed site performance indices provide a balance between clarity and detail. These can be adjusted or expanded as required.

### Concentration Impacts

- 5.5 Those adopting the Low Emission (backstop) approach towards concentration impacts, may wish to adjust the level of change considered to be significant (default level is 5%). Those choosing to retain the traditional (graduated fine control) approach may similarly decide to review the associated bandings and graduated definitions.

### Mitigation and Assessment Detail

- 5.6 Appendices A1-A4 and B1-B3 provide space respectively for specifying mitigation options and assessment methods in more detail. These can be refined, adjusted, expanded or otherwise amended.

## 6 Emissions Assessment Methodology

- 6.1 Templates 2 and 3 introduce the use of emissions assessment to mediate the design and assessment of further mitigation. Both templates are able to accommodate any of the four broad variants (AC, AB, RC, RB). See para 3.7.
- 6.2 This flexibility is partly due to the fact that neither template specifies a detailed technical method. This is by design since the first priority is to specify assessment requirements and reporting format, rather than to dictate the technical details of the approach. There are benefits however in maintaining some control over the methods and assumptions that are applied. This helps to improve the quality and consistency of submissions. It also makes it easier for the developer to respond efficiently and effectively to the given requirements.
- 6.3 The Low Emission Partnership's Emissions Assessment Technical Guidelines (EMA-TG) provide a balance of methodological control without having to take responsibility for designing and maintaining a detailed technical specification. Version 1.1 is currently available, and a more streamlined version 2.0 is under development. Once published, LEP-TG-2.0 will directly support the four method variants, which underpin templates 2 and 3.
- 6.4 Two key areas for consideration when specifying the detailed method are the means and extent to which adjustments can be made to reflect emissions associated with current use and assumed linked or diverted trips. This area is currently unresolved in the draft templates (i.e. flagged green) and it is planned for LEP-TG-2.0 to provide further guidance on this issue.
- 6.5 Other authorities and groups have also published associated guidance and calculation methods. These offer possible alternative points of reference for method specification and standardisation within a local authority's guidance document. Equally, there are good opportunities for all interested parties to work together towards a single fully supported and recognised national standard.