

Site Appraisal Pilots

- Reports & Decisions

Prepared by Green Sphere for the Low Emission Partnership

Summary

- This note provides 11 example opinions formed using the basis laid out within the draft Lancaster Guidance Air Quality and Emissions Planning Guidance (LAN-PG-1.1). A summary of the results is listed below and corresponding worked examples are provided for each site through the main text.
- **PLEASE NOTE:** the examples are based on real development sites, although locations and references have been altered. Various other adjustments and inventions have been made for the purpose of the study (see table at rear of document for details).

Opinions presented have no bearing on acceptability of the real development sites themselves.

	Site	Land use	Type	Test 1	Test 2	Test 3	Test 4	Opinion
1	Beech Avenue	Dwelling Houses	1	M	-	-	-	Acceptable
2	Whitfields	Business	1	NM	-	-	-	Not Acceptable
3	Cheviot Street	Residential Education	1X	M	-	-	M	Acceptable
4	Edinburgh Road	Dwelling Houses	1X	M	-	-	NM	Not Acceptable
5	Handel House	Food retail	2	M	M	-	-	Acceptable
6	Southmall Park	Assembly and Leisure	2	M	NM	-	-	Not Acceptable
7	Finch Manor	Dwelling Houses	2X	M	M	-	M	Acceptable
8	Kennedy Drive	Food Retail	3	M	M	M	-	Acceptable
9	Curie Centre	Business	3	M	NM	M	-	Not Acceptable
10	Firs Road	Non-Resid. Educ	3X	M	M	M	M	Acceptable
11	Chestnut Heath	Business	3X	M	M	NM	M	Not Acceptable

Key: M = met, NM = not met

Reports and Decisions

- Draft Lancaster Air Quality and Emissions Planning Guidance (LAN-PG-1.1) provides a basis for forming an opinion with regards to the acceptability of a site with regards to air quality. This approach is summarised below.
- It is the developer's responsibility to establish the air quality assessment and mitigation expectations for their site at an early stage in the planning process, using the guidelines provided. Early discussion with the local planning authority is necessary to confirm site classification and is recommended in relation to any other aspect of the process, about which they are uncertain or unclear.
- Small sites (Type 1 and Type 1X) do not require substantial submissions, providing that the relevant provisions and exposure screen/measures are appropriately addressed and documented. Larger sites (Type 2, 2X, 3 and 3X) require a formal 'impact assessment and mitigation report.'
- Developer submissions are reviewed by the Council's Air Quality team, who form an opinion as to the acceptability of the proposal in relation to air quality. This opinion will be based, according to the type of site, on the following tests:

Test	Applicable Sites
1 Meets standard provisions for mitigating emissions	All Sites
2 Provides balanced and proportionate emissions mitigation	Type 2, 2X, 3, 3X
3 Avoids unacceptable direct impact on local concentrations	Type 3, 3X
4 Avoids the introduction of new unacceptable public exposure	Type 1X, 2X, 3X

- Developments meeting the relevant tests will be considered acceptable with regards air quality (transport). Those failing any single test will be considered unacceptable and the Air Quality team are likely to recommend their refusal.
- These tests are applied first and foremost on the basis of outcomes, reflecting *the net air quality impacts and risk associated with the site taking proposed mitigation into account*. In situations, where outcomes are not clear cut, perhaps due to quality of the best available data, uncertainties in an assessment or limited mitigation options, the authority may also take into account the extent to which the developer has taken all reasonable steps to identify and address relevant impacts and risks [i.e. their endeavour]. Any such consideration however will not necessarily override the primary consideration of outcomes.
- Final recommendations by the Air Quality team are then considered as part of the wider planning balance through the determination process.

1) Beech Avenue (Local Authority D) Dwelling Houses (Type 1)

Site

Admin	Ref: 14/0005/ABC	Appn: 10-Jun-14	Decn: 10-Apr-15
Location	Beech Avenue, Local Authority D, LAD 123		
Description	13 houses		
Classification	Type 1, as per standard guidance, no LPA adjustments		
Submissions	Design and Access Statement (Apr-14)		

Evidence

Standard Provisions	<p><i>Prior to works commencing on site, a CEMP shall be submitted to and approved in writing by the Local Planning Authority.</i></p> <p><i>Every property built on the site with a dedicated parking space shall be provided with an outdoor, weatherproof electric vehicle charging point readily accessible from the dedicated parking space. The electrical circuits shall comply with the Electrical requirements of BS7671: 2008 as well as conform to the IET code of practice on Electric Vehicle Charging Equipment installation 2012 ISBN 978-1-84919-515-7 (PDF). All EV charging points shall be clearly marked as such and their purpose explained to new occupants within their new home welcome pack / travel planning advice.</i></p>
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Opinion

Test	Criteria	Verdict
1	Meets standard provisions for mitigating emissions	Met

- => **The proposal is acceptable with regards to air quality subject to:**
- (1) LPA approval of CEMP prior to work commencing on site**
 - (2) LPA Approval of relevant EV and installations prior to first occupation/use**

2) Whitfields (Local Authority E)

Business (Type 1)

Site

Admin	Ref: 14/00800/ABC	Appn: 14-Jun-14	Decn: pending
Location	Whitfields, Local Authority E, LAE 345		
Description	B1 Business (1,135 sqm GFA)		
Classification	Type 1, as per standard guidance, no LPA adjustments		
Submissions	<ul style="list-style-type: none"> - Environmental Statement (May-14) - Transport Assessment (May-14) 		

Evidence

Standard Provisions	<p><i>Prior to works commencing on site, a CEMP shall be submitted to and approved in writing by the Local Planning Authority.</i></p> <p><i>No provision made for installation of EV charging infrastructure</i></p>
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Opinion

Test	Criteria	Verdict
1	Meets standard provisions for mitigating emissions	<i>Not Met</i>

=> **The proposal is not acceptable with regards to air quality, due to concerns:**

(1) Sub-standard provisions for EV charging infrastructure

=> **Should these concerns be addressed, the site would then be acceptable, subject to:**

(1) LPA approval of CEMP prior to work commencing on site

(2) LPA Approval of relevant EV and installations prior to first occupation/use

3) Cheviot Street (Local Authority A) Residential Education (Type 1X)

Site

Admin	Ref: 12/0001/XYZ	Appn: 10-Dec-12	Decn: 15-Feb-13
Location	Land To The Rear Of 20-32 Cheviot Street, Local Authority A, LAA 456		
Description	Student accommodation building (79 rooms)		
Classification	Type 1X, as per standard guidance, no LPA adjustments		
Submissions	CNA (traditional air quality impact assessment, Nov-12), XPA (AQ mitigation proposals, submitted to discharge a planning condition, Aug-14)		

Evidence

Standard Provisions *Prior to works commencing on site, a CEMP shall be submitted to and approved in writing by the Local Planning Authority.*

1 Bay (4% of total) marked out for use by electric vehicles only, together with charging infrastructure and cabling.

Exposure *An exposure assessment identified an exposure risk due to close proximity to a bus station. Mitigation measures proposed (mechanical ventilation system for ground and first floor, fresh air inlet to come from side elevations). Review and discussion with the local air quality officer concludes that the mitigation levels are sufficient to avoid unacceptable exposure for those occupying the new houses.*

Opinion

Test	Criteria	Verdict
1	Meets standard provisions for mitigating emissions	Met
4	Avoids the introduction of new unacceptable exposure	Met

=> **The proposal is acceptable with regards to air quality subject to:**

- (1) LPA approval of CEMP prior to work commencing on site**
- (2) LPA Approval of relevant EV and installations prior to first occupation/use**

4) Edinburgh Road (Local Authority E) Dwelling Houses (Type 1X)

Site

Admin	Ref: 15/0005/ABC	Appn: 21-Jun-15	Decn: 20-Sep-15
Location	Edinburgh Road, Local Authority E, LAE 123		
Description	24 houses		
Classification	Type 1X, as per standard guidance, no LPA adjustments		
Submissions	Design and Access Statement (Jul-15)		

Evidence

Standard Provisions	<i>Prior to works commencing on site, a CEMP shall be submitted to and approved in writing by the Local Planning Authority. Each house will be fitted with an electric vehicle charging point</i>
Exposure	<i>Required exposure assessment was not undertaken. Risks posed by the site are unknown.</i>

Opinion

Test	Criteria	Verdict
1	Meets standard provisions for mitigating emissions	<i>Met</i>
4	Avoids the introduction of new unacceptable exposure	<i>Not Met</i>

=> **The proposal is not acceptable with regards to air quality, due to concerns:**
(1) Exposure assessment for exposure sensitive site not undertaken. Therefore potential for the development to create new exposure is not known.

=> **Should these concerns be addressed, the site would then be acceptable, subject to:**
(1) LPA approval of CEMP prior to work commencing on site
(2) LPA Approval of relevant EV and installations prior to first occupation/use

5) Handel House (Local Authority D)

Food retail (Type 2)

Site

Admin	Ref: 13/0001/ABC	Appn: 15-Oct-13	Decn: 03-May-14
Location	Handel House, Local Authority D, LAD 456		
Description	Food store (A1) (1,535 sqm GFA)		
Classification	Type 2, as per standard guidance, no LPA adjustments		
Submissions	TA (Oct-13)		

Evidence

Standard Provisions *Prior to works commencing on site, a CEMP shall be submitted to and approved in writing by the Local Planning Authority.*

4 Bays (3.5% of total) marked out for use by electric vehicles only, together with charging infrastructure and cabling.

Emissions *Assessment estimates without measures impacts as: 1.6t/5y PM10, 14t/5yr NOx, representing a combined damage cost of £286,000/5y. A package of on-site measures is proposed with potential to provide a 25% reduction in NOx, 15% reduction in PM and 15% reduction in overall damage across the five year benefit period. An additional financial contribution of £214,000 is proposed towards supplementary emission reduction measures. Combining on-site and off-site components indicates a total mitigation credit of £257,000 (90% of base impacts).*

Opinion

Test	Criteria	Verdict
1	Meets standard provisions for mitigating emissions	Met
2	Provides balanced and proportionate emissions mitigation	Met

=>

The proposal is acceptable with regards to air quality subject to:

- (1) LPA approval of CEMP prior to work commencing on site**
- (2) LPA approval of relevant EV and installations prior to first occupation/use**
- (3) LPA approval of a transport emissions mitigation implementation, monitoring and reporting plan prior to work commencing**

6) Southmall Park (Local Authority F) **Assembly and Leisure (Type 2)**

Site

Admin	Ref: 15/0001/ABC	Appn: 14-May-15	Decn: 09-Oct-15
Location	Southmall Park, Local Authority F, LAF 123		
Description	Indoor Multi-Sports Centre (14 ha)		
Classification	Type 2, as per standard guidance, no LPA adjustments		
Submissions	TA (Apr-15)		

Evidence

Standard Provisions	<i>Prior to works commencing on site, a CEMP shall be submitted to and approved in writing by the Local Planning Authority.</i>
	<i>Bay (2.1 % of total) marked out for use by electric vehicles only, together with charging infrastructure and cabling.</i>
Emissions	<i>No Emissions Assessment undertaken, no further mitigation proposed</i>

Opinion

Test	Criteria	Verdict
1	Meets standard provisions for mitigating emissions	<i>Met</i>
2	Provides balanced and proportionate emissions mitigation	<i>Not Met</i>

=> **The proposal is not acceptable with regards to air quality, due to concerns:**
(1) No Emissions Assessment undertaken, no further mitigation proposed

=> **Should these concerns be addressed, the site would be acceptable, subject to:**
(1) Any requirements associated with the outstanding concerns
(2) LPA approval of CEMP prior to work commencing on site
(3) LPA Approval of relevant EV and installations prior to first occupation/use

7) Finch Manor (Local Authority A)**Dwelling Houses (Type 2X)****Site**

Admin	Ref: 14/00001/XYZ	Appn: 01-Jan-14	Decn: 18-Sep-14
Location	Finch Manor, Stonewall Road, Local Authority A, LAA 123		
Description	128 residential dwellings		
Classification	Type 2X, as per standard guidance, no LPA adjustments		
Submissions	TA (Jan-14); AQ Officer recommended measures (Feb-14)		

Evidence

Standard Provisions	<i>Prior to works commencing on site, a CEMP shall be submitted to and approved in writing by the Local Planning Authority.</i>
	<i>EV Infrastructure: Each house will be fitted with an electric vehicle charging point.</i>
Emissions	<i>Assessment estimates without measures impacts as: 0.3t/5y PM10, 3t/5yr NOX, representing a combined damage cost of £119k/5y. A package of on-site measures is proposed with potential to provide a 15% reduction in NOx, 11% reduction in PM and 14% (£16,000) reduction in overall damage across the five year benefit period. An additional financial contribution of £75,000 is proposed towards supplementary emission reduction measures. Combining on-site and off-site components with design credit of £17,000 provides a total mitigation credit of £108,000 (91% of base impacts).</i>
Exposure	<i>Review of local monitoring data, AQMA designations and discussion with the local air quality officer concluded that despite the site being located within an AQMA, 'NO2 levels at the building façade are unlikely to lead to unacceptable exposure for those occupying the new houses'. No exposure measures are therefore required.</i>

Opinion

Test	Criteria	Verdict
1	Meets standard provisions for mitigating emissions	Met
2	Provides balanced and proportionate emissions mitigation	Met
4	Avoids the introduction of new unacceptable exposure	Met

- => **The proposal is acceptable with regards to air quality subject to:**
- (1) LPA approval of CEMP prior to work commencing on site**
 - (2) LPA approval of relevant EV and installations prior to first occupation/use**
 - (3) LPA approval of a transport emissions mitigation implementation, monitoring and reporting plan prior to work commencing**

8) Kennedy Drive (Local Authority B)**Food Retail (Type 3)****Site**

Admin	Ref: 14/00002/ABC	Appn: 01-Jan-14	Decn: 15-Mar-15
Location	Kennedy Drive, Local Authority A, LAB 123		
Description	Change of use (and external alterations) from non-food retail to food retail (9,468 sqm gross)		
Classification	Type 3, as per standard guidance, no LPA adjustments		
Submissions	TA (Apr-14, Nov-14), CNA (traditional AQIA, Mar-14)		

Evidence

Standard Provisions	<i>Prior to works commencing on site, a CEMP shall be submitted to and approved in writing by the Local Planning Authority. 12 EV Recharging Points (with plan to maintain, service and network for 25 years) (provision is 2.4% of total 509 bays).</i>
Emissions	<i>Five Years Base Harm Estimate: NOx (35t), PM10 (4t), Damage Cost (£1.4M) Proposal considers full range of mitigation and proposes a package of measures Mitigation Credit: Design (£0), Onsite (£304k), Contribution (£500k). Providing total mitigation credit of £804k, corresponding to 56% of base fleet impacts, which meets LPA lower threshold of acceptable mitigation (>50% TMC).</i>
Concentrations	<i>Modelled impact: 2.1ug/m3 (5.3% of AQO) at a background receptor (31.5 µg/m3). Indicates that site impacts are at warning level, which adds weight to the need for effective on-site mitigation.</i>

Opinion

Test	Criteria	Verdict
1	Meets standard provisions for mitigating emissions	Met
2	Provides balanced and proportionate emissions mitigation	Met
3	Avoids unacceptable direct impact on local concentrations	Met

- => **The proposal is acceptable with regards to air quality subject to:**
- (1) LPA approval of CEMP prior to work commencing on site**
 - (2) LPA approval of relevant EV and installations prior to first occupation/use**
 - (3) LPA approval of a transport emissions mitigation implementation, monitoring and reporting plan prior to work commencing**

9) Curie Centre (Local Authority A)

Business (Type 3)

Site

Admin	Ref: 09/00330/DPA	Appn:15-Apr-09,	Decn: 29-Jun-09
Location	Bolsworth Lane, Local Authority A, LAA 345		
Description	A Business Park with access and landscaping (34,000 sqm)		
Classification	Type 3, as per standard guidance, no LPA adjustments		
Submissions	TA (Apr-09, Jan-13), CNA (traditional AQIA, Apr-09, Jun-12)		

Evidence

Standard Provisions	<p><i>Prior to works commencing on site, a CEMP shall be submitted to and approved in writing by the Local Planning Authority.</i></p> <p><i>20 Bays (2.4 % of total) marked out for use by electric vehicles only, together with charging infrastructure and cabling.</i></p>
Emissions	<p><i>Assessment estimates without measures impacts as: 7t/5y PM10, 58t/5yr NOx, representing a combined damage cost of £2,400,000/5y. A package of on-site measures is proposed with potential to provide a 5% reduction in NOx, 5% reduction in PM and 5% reduction in overall damage across the five year benefit period. An additional financial contribution of £603,200 is proposed towards supplementary emission reduction measures. Combining on-site and off-site components indicates a total mitigation credit of £723,800 (30% of base impacts). This does not meet LPA lower acceptable levels.</i></p>
Concentrations	<p><i>The maximum predicted increase in annual average NO2 at existing residential receptors is 1.54µg/m3. This is less than 5% of the AQO, therefore not a severe or warning level impact.</i></p>

Opinion

Test	Criteria	Verdict
1	Meets standard provisions for mitigating emissions	Met
2	Provides balanced and proportionate emissions mitigation	Not Met
3	Avoids unacceptable direct impact on local concentrations	Met

=> **The proposal is not acceptable with regards to air quality, due to concerns:**
(1) Balance/extent of mitigation not commensurate with nature/scale of impacts

=> **Should these concerns be addressed, the site would be acceptable, subject to:**
(1) Any requirements associated with the outstanding concerns
(2) LPA approval of CEMP prior to work commencing on site
(3) LPA Approval of relevant EV and installations prior to first occupation/use

10) School, Firs Road (Local Auth. D) Non Res. Institute (Type 3X)

Site

Admin	Ref: 14/0020/ABC	Appn: 15-Nov-14	Decn: 10-Mar-15
Location	Westwood College, Firs Road, Local Authority D, LAD 654		
Description	New secondary school (GFA 7,841 sqm, up to 720 pupils)		
Classification	Type 3X, as per standard guidance, no LPA adjustments		
Submissions	Transport Statement (Nov-14); CNA ('screening' traditional AQIA without dispersion modelling of operational impacts, Nov-14) Planning conditions 6 and 7 relating to EV provision and CEMP		

Evidence

Standard Provisions	<p><i>Prior to works commencing on site, a CEMP shall be submitted to and approved in writing by the Local Planning Authority.</i></p> <p><i>A minimum of 2 dedicated electric vehicle parking bays equipped with EV charging facilities shall be provided for staff and visitors from the opening date of the scheme. A further two spaces shall be provided once the school is fully operational or within 5 years of the opening date (whichever is sooner). A suitable parking management strategy must be put in place to ensure that priority parking is given to electric vehicles wishing to use the charging points. The charging points/bays must be clearly marked and its availability promoted to staff and visitors through the school travel plan.</i></p>
Emissions	<p><i>Assessment estimates without measures impacts as: 0.2t/5y PM10, 1.7t NOx, representing a combined damage cost of £70,000/5y. A package of on-site measures is proposed with potential to provide a 25% reduction in NOx, 15% reduction in PM and 15% reduction in overall damage across the five year benefit period. An additional financial contribution of £52,200 is proposed towards supplementary emission reduction measures. Combining on-site and off-site components indicates a total mitigation credit of £62,700 (90% of base impacts).</i></p>
Concentrations	<p><i>The maximum predicted increase in annual average NO2 is 0.54µg/m3. This is less than 5% of the AQO, therefore not a severe or warning level impact.</i></p>
Exposure	<p><i>Screen indicated that NO2 levels are unlikely to cause unacceptable exposure, therefore no provisions required.</i></p>

Opinion

Test	Criteria	Verdict
1	Meets standard provisions for mitigating emissions	Met
2	Provides balanced and proportionate emissions mitigation	Met
3	Avoids unacceptable direct impact on local concentrations	Met
4	Avoids the introduction of new unacceptable exposure	Met

=> **The proposal is acceptable with regards to air quality subject to:**

- (1) LPA approval of CEMP prior to work commencing on site**
- (2) LPA approval of relevant EV and installations prior to first occupation/use**
- (3) LPA approval of a transport emissions mitigation implementation, monitoring and reporting plan prior to work commencing**

11) Chestnut Heath (Local Authority C)**Mixed Use (Type 3X)****Site**

Admin	Ref: 15/0003/PQR	Appn: 01-Jan-15	Decn: Pending
Location	Corley Road, Local Authority C, LAC 123		
Description	A business-led mixed-use development (38,000 sqm B1)		
Classification			
Submissions	TA (incl. within ES, Nov-15) CNA (incl. within AQ chapter of ES, Nov-15) XPA (incl. within AQ chapter of ES, Nov-15) Emission Damage Cost Calculation (incl. within AQ chapter of ES, Nov-15)		

Evidence

Standard Provisions	<i>Prior to works commencing on site, a CEMP shall be submitted to and approved in writing by the Local Planning Authority.</i> <i>75 Bays (2.3 % of total) marked out for use by electric vehicles only, together with charging infrastructure and cabling.</i>
Emissions	<i>Emissions Assessment estimates without measures impacts as: 8t/5y PM10, 97t/5yr NOx, representing a combined damage cost of £795,000 over 5 years. A package of on-site measures is proposed with potential to provide a 13% reduction in NOx, 10% reduction in PM and 13% (£102,000) reduction in overall damage across the benefit period (5 years). An additional financial contribution of £500,000 is proposed towards supplementary emission reduction measures. Combining the latter with the value of on-site mitigation benefits (£102,000) indicates a total mitigation credit of £602,000 (no design credit was applied). This corresponds to 76% of base fleet impacts.</i>
Concentrations	<i>Assessment concludes that 'the development is projected to increase NO2 annual average from 40.5 ug/m3 to 42.6 ug/M3 at a location within an existing AQMA. This increase represents a severe impact under LPA guidelines.</i>
Exposure	<i>Screen indicated that there is potential new exposure, appropriate mitigation proposed.</i>

Opinion

Test	Criteria	Verdict
1	Meets standard provisions for mitigating emissions	Met
2	Provides balanced and proportionate emissions mitigation	Met
3	Avoids unacceptable direct impact on local concentrations	Not Met
4	Avoids the introduction of new unacceptable exposure	Met

=> **The site has potential to significantly worsen exceedance of the NO2 air quality objective within an existing AQMA. It is not therefore acceptable with regards air quality. It is also unlikely that practical mitigation options exists with the potential to address the concerns and so make the site acceptable**

Table of evidence, adjustments and inventions for purposes of the worked examples

<p>1. Beech Avenue</p>	<p><u>Construction:</u> CEMP was conditioned as part of Decision Notice. The statement regarding construction in the worked example is consistent with this.</p> <p><u>EV Infrastructure Conditioned:</u> Every property built on the site with a dedicated parking space shall be provided with an outdoor, weatherproof electric vehicle charging point readily accessible from the dedicated parking space. The electrical circuits shall comply with the Electrical requirements of BS7671: 2008 as well as conform to the IET code of practice on Electric Vehicle Charging Equipment installation 2012 ISBN 978-1-84919-515-7 (PDF). All EV charging points shall be clearly marked as such and their purpose explained to new occupants within their new home welcome pack / travel planning advice.</p>
<p>2. Whitfields</p>	<p><u>Application:</u> this example is actually part of a large mixed use development. It has been treated separately here for the purposes of the worked example.</p> <p><u>Construction:</u> CEMP was conditioned as part of Decision Notice. The statement regarding construction in the worked example is consistent with this.</p> <p><u>EV:</u> The application (part of a large mixed use development) includes provision for EV infrastructure for all land uses. The provision for Non-Food Retail is 20% of total car parking: min car parking described as 1 per 20sqm GFA (57), EV infrastructure 2 charging points per 200 sqm GFA (11). For the purposes of this worked example, it is assumed that no provision has been made for EV infrastructure.</p>
<p>3. Cheviot Street</p>	<p><u>Construction:</u> CEMP was conditioned as part of Decision Notice. The statement regarding construction in the worked example is consistent with this.</p> <p><u>EV:</u> The application does not include provision for parking. For purposes of this example (demonstrating compliance with Test 1), it is assumed that there are 23 on-site parking spaces, of which 1 is dedicated EV.</p>
<p>4. Edinburgh Road</p>	<p><u>Construction:</u> CEMP was conditioned as part of Decision Notice. The statement regarding construction in the worked example is consistent with this.</p> <p><u>EV:</u> The following provision is made for parking and EV within the application. Each house is provided with at least one dedicated parking space on plot with an additional 10 visitor spaces provided near both the site entrance and at the north-western boundary. Two of the houses with parking within the curtilage of the property will be provided with EV charging points built into the wall of the houses. For the purposes of this example, it is assumed that all houses are fitted with an EV charging point.</p> <p><u>Exposure:</u> No information was provided on air quality exposure as part of the application. Although consultation with the EHO cited 'no concerns' as regards air quality. For the purposes of this example it is assumed that an exposure assessment was required and not completed.</p>

<p>5. Handel House</p>	<p><u>Construction:</u> CEMP was conditioned as part of Decision Notice. The statement regarding construction in the worked example is consistent with this.</p> <p><u>EV:</u> No statement on EV within application. Provision is made for 114 parking spaces within the application. Assumed 4 of these are dedicated EV, for purposes of this example.</p> <p><u>Emissions:</u> Uses estimated emissions impacts / benefits. A standard calculation was undertaken based on the protocols defined within LEP guidance (EMA-TG 2.0), utilising (i) EFT (v6.0.2), assuming 'urban' roads and 48kph; and (ii) Defra Damage Costs (Sep-15), assuming 'Urban small' location, and using the central value. No adjustments were made. The reported figures reflect absolute journeys for the site and make no deductions for linked trips. Annual trip data for cars (customers and staff) and HGVs (service) was estimated using the defaults within the LET (v1.1), which are based on TRICS outputs. (Using actual development size and assuming location as 'edge of town').</p>
<p>6. Southmall Park</p>	<p><u>Construction:</u> CEMP was conditioned as part of Decision Notice. The statement regarding construction in the worked example is consistent with this.</p> <p><u>EV:</u> No EV information included within the application. The following condition was attached to the planning permission: "Details of the electric vehicle charging points (EVCP) to be provided within the scheme shall be submitted to and approved by the Local Planning Authority prior to the implementation of the development and the approved EVCP shall be installed prior to the first use of the facility." EV provision has been invented for the purpose of this example. Parking provision is proposed for 47 cars. Assume 1 is dedicated EV.</p>
<p>7. Finch Manor</p>	<p><u>Construction:</u> CEMP was conditioned as part of Decision Notice. The statement regarding construction in the worked example is consistent with this.</p> <p><u>EV:</u> No information on EV. No specific numbers on parking, other than 'complies with Lancaster parking standards'. 128 houses, assume all fitted with EV charging infrastructure.</p> <p><u>Emissions:</u> Uses emissions impacts/benefits data from corresponding EMA example</p>
<p>8. Kennedy Drive</p>	<p><u>Construction:</u> CEMP was conditioned as part of Decision Notice. The statement regarding construction in the worked example is consistent with this.</p> <p><u>EV:</u> Application includes provision for 6 EV Recharging Points (with plan to maintain, service and network for 25 years). Total parking provision is 509 spaces (1.2%). EV provision has been assumed to be 12 spaces (2.4% total), to allow this example to pass Test 1.</p> <p><u>Emissions:</u> Uses emissions impacts/benefits date from corresponding EMA example. Also invents reference to LPA performance threshold.</p>

<p>9. Curie Centre</p>	<p><u>Construction:</u> CEMP was conditioned as part of Decision Notice. The statement regarding construction in the worked example is consistent with this.</p> <p><u>EV:</u> No EV information included within the application. Parking provision is proposed for approx. 850 cars. Assume 20 are dedicated EV, for the purposes of this example.</p> <p><u>Emissions:</u> Uses estimated emissions impacts / benefits. A standard calculation was undertaken based on the protocols defined within LEP guidance (EMA-TG 2.0), utilising (i) EFT (v6.0.2), assuming 'urban' roads and 48kph; and (ii) Defra Damage Costs (Sep-15), assuming 'Urban large' location, and using the central value. No adjustments were made. The reported figures reflect absolute journeys for the site and make no deductions for linked trips. Annual trip data for cars (business and staff) was estimated using the defaults within the LET (v1.1), which are based on TRICS outputs. (Using actual development size and assuming location as 'free standing'). Note: Approval includes planning condition (15) requiring automated system of monitoring vehicle trips to and from site. Planning condition (16) sets requirements on travel plan. Further conditions relate to limits on occupation of site if traffic data exceeds specified thresholds.</p>
<p>10. Firs Road</p>	<p><u>Construction:</u> CEMP was conditioned as part of Decision Notice. The statement regarding construction in the worked example is consistent with this.</p> <p><u>EV requirements conditioned:</u> A minimum of 2 dedicated electric vehicle parking bays equipped with EV charging facilities shall be provided for staff and visitors from the opening date of the scheme. A further two spaces shall be provided once the school is fully operational or within 5 years of the opening date (whichever is sooner). A suitable parking management strategy must be put in place to ensure that priority parking is given to electric vehicles wishing to use the charging points. The charging points/bays must be clearly marked and its availability promoted to staff and visitors through the school travel plan.</p> <p><u>Emissions:</u> Uses estimated emissions impacts / benefits. A standard calculation was undertaken based on the protocols defined within LEP guidance (EMA-TG 2.0), utilising (i) EFT (v6.0.2), assuming 'urban' roads and 48kph; and (ii) Defra Damage Costs (Sep-15), assuming 'Urban small' location, and using the central value. No adjustments were made. The reported figures reflect absolute journeys for the site and make no deductions for linked trips. Annual trip data for cars (education escort and staff) was estimated using the defaults within the LET (v1.1), which are based on TRICS outputs. (Using actual development size and assuming location as 'edge of centre').</p> <p><u>Concentrations:</u> No dispersion modelling included within developer's submission. (Traffic data was cited as max of 1,234 as 24 hr AADT, but below levels required for further assessment according to LPA Guidance.) Concentration data is invented in the text below, for the purposes of this example.</p>

<p>11. Chestnut Heath</p>	<p><u>Construction:</u> A statement on CEMP is included as part of the developer's air quality assessment. The statement regarding construction in the worked example is consistent with this.</p> <p><u>EV:</u> The proposed development includes provision for 38 EV, with the statement that the use could be monitored and increased to 75 if regularly used. Total car parking provision across the whole site is 3,239, so 38 and 75 EV spaces reflects 1.2% and 2.3% respectively of total parking provision). For the purposes of this example, it is assumed that 75 spaces are provided.</p> <p><u>Emissions:</u> Uses emissions impacts/benefits date from corresponding EMA example. Actual information provided by developer: without measures impacts: 0.28t/5y PM10, 1.46t/5yr NOx, representing a combined damage cost of £266,000 over 5 years. A travel plan is proposed, emissions impacts are not quantified. A financial contribution is proposed towards retention and long term funding for existing bus service (no specific sum suggested). Developer's DCC Method: dev specific trip rates, 10km trip distance, use of EFT (ave speed 48kph) x 5yrs, Defra IGCB damage costs).</p> <p><u>Concentrations:</u> Actual CNA concluded: 'the development is projected to increase NO2 annual average from 40.93 ug/m3 to 41.50 ug/M3 (0.57 ug/m3 change = 1.4% of AQO) at a location within an existing AQMA. This is not a severe impact under LPA guidelines. However, concentrations evidence below is adjusted for the purposes of this example to illustrate a test 3 fail</p> <p><u>Exposure:</u> Statement invented to accord with invented high concentration data.</p>
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