

DATE OF STATEMENT	18th February 2018
DEVELOPMENT	North Herts Local Plan – East of Luton development
MATTER	Air Quality
Submitted by	Barry Brown, 16 Rotherfield, Stopsley, Luton LU2 8RX

In addressing the proposed development of 2100 homes – Sites EL1, EL2 and EL3 the contention is that the proposals are fundamentally flawed because:

- Adequate air quality monitoring of specific areas to be affected by the housing development (including Wigmore Lane, Crawley Green Road and Eaton Green Lane) has not been undertaken. NO monitoring sites exist within these locations.
- There has been no collaboration between North Herts District Council (NHDC) and Luton Borough Council (LBC) to establish a strategy and delivery plans that assess the combined impact on air pollution of the proposed housing development, airport expansion and the proposed Century Park.
- Both NHDC and LBC are not fulfilling their statutory duty to comply with air pollution legislation by failing to assemble a credible approach to assessing the future impact of the proposed housing scheme (2100 homes), leading to significant gaps in air pollution measurement and results that will in no way reflect the future reality of housing development, airport expansion and century park development.
- No account has been taken that within the timeframe for the housing development there will be an additional 7000 jobs created at Century Park and up to 16000 jobs created due to airport expansion. Additionally, up to a further 6 schools will be established in the affected area together with other social services needs. Butterfield Green Industrial Park will also have doubled in size as per LBC Local Plan.
- Plans are not sustainable as the combined impacts of all developments will greatly increase air pollution and no adequate mitigation of any kind has been proposed.

Detail to support these contentions are shown below:

What legal and procedural requirements of the Planning and Compulsory Purchase Act 2004 (as amended) and associated Regulations does the Plan fail to meet?

Planning and Compulsory Purchase Act 2004; Chapter 5, Part 2, Local Development Survey, Section 13, Survey of Area;

13 Survey of area

(1) The local planning authority **must keep under review the matters which may be expected to affect the development of their area or the planning of its development.**

(2) These matters include—

(a) the principal physical, economic, social and **environmental characteristics of the area of the authority;**

(e) **any other considerations which may be expected to affect those matters;**

(f) **such other matters as may be prescribed** or as the Secretary of State (in a particular case) may direct.

(3) The matters also include—

(a) **any changes which the authority think may occur in relation to any other matter;**

(b) the effect **such changes are likely to have on the development of the authority's area or on the planning of such development.**

(4) **The local planning authority may also keep under review and examine the matters mentioned in subsections (2) and (3) in relation to any neighbouring area to the extent that those matters may be expected to affect the area of the authority.**

(5) **In exercising a function under subsection (4) a local planning authority must consult with the local planning authority for the neighbouring area in question.**

THE EVIDENCE OF UNSOUNDNESS

The Plan fails in “survey of the area”, with regards to the site’s environmental characteristic of air

pollution. Consequently it fails to exercise a function under subsection (4) to keep under review and examine the matters mentioned in subsections (2) and (3) in relation to any neighbouring area to the extent that those matters may be expected to affect the area of the authority. It has thus not exercised a function under subsection (4) a local planning authority must consult with the local planning authority for the neighbouring area in question.

Additionally both NHDC and LBC fail **with Duty to Co-operate. They co-fail to adhere to statutory requirements regarding air quality.**

This is because there are no air particulate monitoring sites anywhere in the East of Luton/ at and around the New Century Park Site or the NHDC Local Plan's SP19 site.

All of Wigmore, Crawley and Stopsley have been completely left off of the LBC's air monitoring program.

North Herts has also not conducted any air quality monitoring of its own in this area, on either side of the border in or around this Strategic Site.

Wigmore, Crawley and Stopsley, which are the residential areas neighbouring NCP and SP19, as well as the expanding airport, have zero monitoring stations.

LBC replied to a Freedom of Information Request: "Stopsley and Wigmore do not have a air particulate monitoring programme operated by the Council," (30 Oct 2017; as it was written)

Both Councils have been aware of the non-collection of air pollution data for at least two years.

NHDC was notified by multiple representations, during public consultations in the last five years, relating to LE1, LE2 and LE3 (identical to SP19). Each Council stated no data was available in replies to the Freedom of Information requests sent, requesting air pollution monitoring data. See Appendix 3. Responses from Luton were dated 13 Jun 2016 and said:

11. Have there been any studies on air pollution on Crawley Green Road and Luton Road? If so please provide me with the copies of those most recent.

All of LBCs nitrogen dioxide monitoring data (including for LN70) is available at <http://www.hertsbedsair.net/> (click on "NO2 Diffusion tube data" on the LHS of the screen). This spreadsheet provides locations and measured monthly concentrations. *Please note that this information has not been bias adjusted.

LBC has not undertaken any detailed assessments of Crawley Green / Luton Road. Luton Road is situated in North Hertfordshire District Councils Area who may be able to advise regarding this location.

12. Have there been any studies carried out on noise pollution along Crawley Green Road and Luton Road? If so please provide me with the copies of those most recent.

Environmental Protection has not carried out any noise pollution studies along Crawley Green Road. Luton Road as per question 11 is outside the borough boundary and is part of North Hertfordshire District Council.

With neither Council measuring air pollution or noise pollution, in any residential areas across the East of Luton wards, there is no data gathered to date. Therefore to ascertain East of Luton's air quality or impacts of noise is impossible.

Old data exists for those areas over ten years ago, which started to indicate several breaches occurring in the area. Monitoring was then dropped by Luton. It suggests they saw there were clear present and emerging problems, so they quit monitoring altogether.

Today, the residential areas closest to the airport are the very places that should be being monitored. They are closest to the aircraft pollution and noise. The omission of the obvious makes it seem suspicious.

LLAL cannot be complicit in this unsoundness and non-legality.

ID site codes starting with “LN” are LBC’s. It has 37 non-automatic monitoring sites and 2 automatic ones – so its total is 39.

LN 11, LN15, LN16, LN17, LN18, LN22, LN23, LN24, LN25, LN26, LN27, LN28, LN52, LN53, LN54, LN55, LN56, LN57, LN58, LN59, LN61, LN62, LN63, LN64, LN65, LN66, LN67, LN68, LN69, LN70, LN71, LN72, LN73, LN74, LN75, LN76, LN77 (non-automatic)

L01, LN60 (automatic).

29 Sites between LN12 and LN51 do not exist

ID site codes starting with “LA” are London Luton Airport Operations Limited’s (LLAOL) – it has 17 non-automatic monitoring sites, and one of them, LA08 is also automatic:

LA01, LA02, LA03, LA04, LA05, LA06, LA07, LA08, LA09, LA10, LA11, LA12, LA13, LA14, LA15, LA16, LA17.

Therefore there are a total of 56 monitoring sites, all outside of East Luton.

What contaminants do those measure for Luton (excluding the “missed off” East of Luton)?

56 monitoring sites measure just NO₂:

There are **no monitoring locations measuring Sulphur Oxide** anywhere in Luton;

There are **no monitoring locations measuring Carbon Monoxide** anywhere in Luton;

There’s just 1 location (LN60) measuring PM₄, PM_{2.5} and PM₁;

There’s just 2 locations (LN60 & LA08) measuring PM₁₀.

This program falls well below statutory regulations.

INCONSISTENT WITH NATIONAL POLICY

Legally binding targets have been set to both reduce total emissions of key pollutants, and to limit their concentrations in air within the UK (National Emission Ceilings Regulations, 2002) and other European countries (European Directive 2001/81/EC, 2001).

The framework for managing air quality in the UK is summarised below:

Environment Act 1995 - Under this, local authorities must review air quality. If air quality objectives in a particular area are not expected to be met, an air quality management area must be designated.

Air quality guidelines - The World Health Organisation has set these research-based guidelines to protect people's health.

EU Air Quality Directives - based on the World Health Organisation’s air quality guidelines, set limits for eight air pollutants.

UK Air Quality Regulations - These incorporate EU air quality directives into UK law, and introduce air quality objectives. Under the UK Air Quality Regulations, Governments must keep within limits set by EU Air Quality Directives for eight pollutants, and must report results to the European Commission.

Air quality action plans - Each local authority must develop an air quality action plan setting out measures to improve air quality and meet the air quality objectives in any air quality management area.

The clear evidence shows that Luton Council and NHDC are failing to measure the East of Luton residential areas near their SP19 site, which has been strategically earmarked for development.

The Authorities are entirely failing to measure Nitrogen Dioxide (NO₂) and Carbon Monoxide (CO) in all of the East of Luton’s three wards neighbouring its airport; namely Wigmore, Stopsley and Crawley.

LBC is failing to measure PM₁₀, PM₄, PM_{2.5} and PM₁ everywhere in Luton - except at 1 solitary faraway site in Dunstable Rd.

The Authorities are failing to measure Sulphur Dioxide (SO₂) completely for ALL LOCATIONS.

DIAGRAM: The Plan’s SP19 Strategic Site is proposed to be placed in and next to these

completely unmonitored areas.

NOTHING HAPPENING!

Figure 1: Map of Zero Monitoring Locations in East Luton; showing where they ARE NOT measuring and the location of the SP19 Strategic Site.



INSTRUCTIONS TO MAKE IT LEGAL

Important air pollutants in the UK, as identified within the UK Air Quality Strategy (Defra, 2007) need listing to deter the present oversight.

Contaminants as given by **UK Air Quality Strategy (Defra, 2007)** must be measured and limited at all sites in accordance with National Policy. Sites that are Strategic and/ or are near airports or else involve roads frequently used as Heavy Goods Vehicle transit routes, must have pollutants monitored at pre-planning stages for time periods which are adequate to reach Air Objective conclusions. Contaminants to be monitored are:

- Oxides of Nitrogen (NOX) Aircraft engines also produce NOX [Nitrogen dioxide (NO₂) and nitric oxide (NO) are both oxides of nitrogen and together are referred to as NOX]
- Particulate Matter (PM as PM₁₀ and PM_{2.5})
- Ozone (O₃) (O₃ can be formed through chemical reactions between air pollutants (primarily NOX) and Volatile Organic Compounds (VOCs)
- Sulphur Dioxide (SO₂)
- Benzene (C₆H₄) [Has a variety of sources, but primarily arises from domestic and industrial combustion and road transport].
- 1,3-butadiene Derives mainly from combustion of petrol in motor vehicles.
- Carbon monoxide (CO)
- Lead (Pb)
- Ammonia [Ammonia is emitted from waste disposal. No ammonia is emitted by aircraft engines but sulphur and NOX emissions from aircraft can interact with ammonia to form particulate matter in the air such – for example ammonium nitrate and ammonium sulphate].
- Ultra-fine particulates (UFP) (Airports Council International has published a report *Airports Council International Europe*, 2013)"
- The Council and LLAL must act on precise legislation relating to air quality impact. As the case study provided regarding Luton and NHDC's current oversight, it has evidently been completely ignored.
- Failure to effectively demonstrate adherence to Air Quality assurance is not acceptable. If inadequate consideration has been given to the air quality impacts of development then it can result in illegal air quality breaches, and the site should be removed from the Local Plan, since such

oversight is not in accordance with NFFP and can form no part of any sound Local Plan.

- Strict adherence to UK Air Quality Strategy (Defra, 2007) should be assessed at pre-planning stages and before development in all sites, especially those closest to airports. The local authority must measure accurately in compliance with the UK Air Quality Regulations, so that all contaminants shall be fully identified and assessed. Effective measures must be taken prior to planning applications, to ensure that there are no oversights purposeful or accidental at that point or any in the future.
- Plans near to airport developments must demonstrate compliance with the mandatory air quality limit values set down in EU Directive 1999/30/EC, transposed into domestic law by The Air Quality Limit Values Regulations 2003.

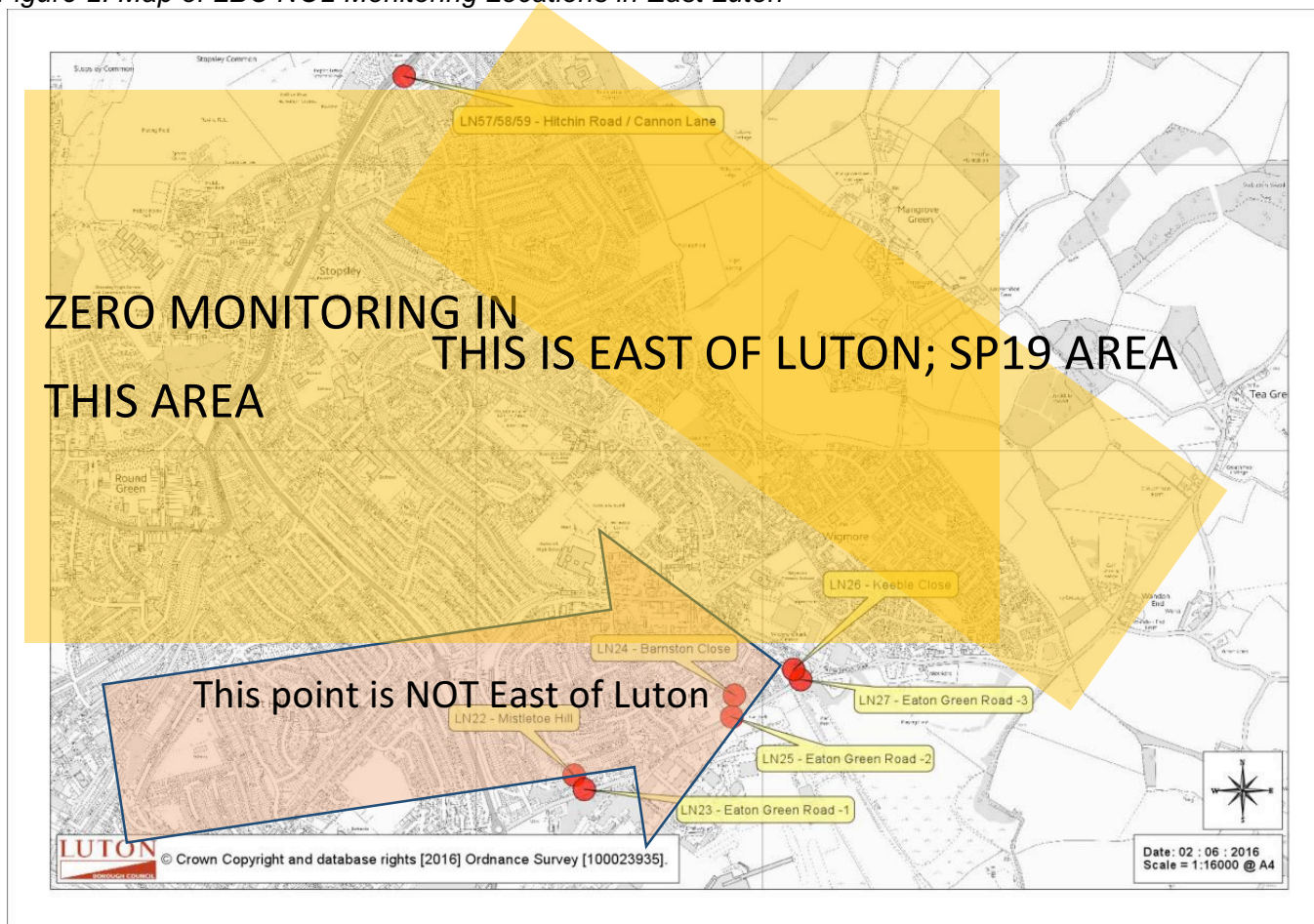
WHERE ARE LBC AND LLAL MEASURING?

In fulfilment of Part IV of the Environment Act 1995, Local Air Quality Management; LBC produces an annual report: *Local Air Quality Management Annual Status Report June 2016; [2016 Air Quality Annual Status Report (ASR)]*. It says “Where an **exceedance is considered likely** the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.” (p.1 LAQM Annual Status Report 2016). Yet there are **NO AQMAs in the residential areas near Luton Airport and SP19?**

Luton Council’s report implies monitoring is taking place in Wigmore, Stopsley, Crawley, Round Green and Farley wards, referencing “LN28 Keeble Close” – it is in fact nowhere near East Luton wards affected. This “visual illusion” is repeated with the “LN27 Eaton Green Road” label also. Again, it is far from any district associated with the proposed development.

THE MAP BELOW SHOWS NO SITES, WHILST IT IS IMPLIED THERE ARE:

Figure 2: Map of LBC NO2 Monitoring Locations in East Luton



By avoiding monitoring completely, both councils have of course consequentially entirely avoided the possibility of finding any concentrations of nitrogen dioxide, carbon dioxide and any other contaminant, in East of Luton; Wigmore, Stopsley, Crawley, Round Green, and Farley Hill. By avoiding taking any readings whatsoever of any air contaminant whatsoever, they can state they have no data suggesting there is any need for an AQMA.

Policies Regarding Air quality the Need Adding:

Air Quality Management is a statutory requirement.

Planning permission will ONLY be granted where development proposals:

Effectively actualise cohesive and consistent adherence to EU Air Quality Directives, UK Air Quality Regulations and Air quality action plans, by ensuring that potential and actual impacts upon local air quality remain within statutory limits.

Establish adequate data to ensure that no blind spots exist leading to an area being deemed safe for further development, based on falsification of conclusions from incorrect or non-existent data. Absence of data must not lead to any presumed or false conclusion that there is no requirement for an AQMA to be established, nor else for emission-reducing measures to be introduced.

Prior to designation of any Economic Sites and all stages of the planning process, Air Quality Management must be actualised as a priority, by demonstrating in the first instance, that sound, accurate and recent data has been gathered; due to this being a legal necessity in planning process.

Before any parts of the Plan can be adopted, as well as during demolition/ construction phases and as a result of its final occupation and use; emissions into the atmosphere and their potential effects upon health and the local environment shall have been measured to a satisfactorily statutory standard. "Satisfactorily" meaning to necessary degree as to establish whether pollutants currently meet Air Quality Objectives in England; which means no less than one year's worth of data must be recorded for each pollutant; since breaches must be counted over an entire year.

The authority must propose appropriate levels of mitigation to minimise emissions to the atmosphere and their potential effects upon health and the local environment; and

Carry out air pollution impact assessments, to determine the impact on local air quality of the development, otherwise the development will be refused.

Air pollution impact assessments are required and there is a mandatory requirement on developers to provide appropriate levels of mitigation to address emissions of pollutants to the atmosphere and to ensure complete air pollution monitoring data exists, so that their effects in the future are measurable and true.

BREACHES WE CAN SEE IN RED
2016 Air Quality Annual Status Report (ASR) LBC
No NHDC reports exist for the affected area

Appendix B: Full Monthly Diffusion Tube Results for 2015

Table B.1 – NO₂ Monthly Diffusion Tube Results – LBC

NO₂ Mean Concentrations (µg/m³)

Site ID	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean Raw Data	Annual Mean Bias Adjusted (1)
LN11	45.90	47.76	39.16	31.65	35.24	29.21	30.21	36.22	38.21	50.92	36.19	35.40	38.01	34.58
LN15	35.78	39.08	31.85	42.35	30.84	24.02	27.97	31.54	30.24	35.35	40.52	32.08	33.47	30.46
LN16	49.98	44.11	39.62	37.19	35.87	27.64	33.1	39.05	37.42	42.03	42.41	38.30	38.89	35.39
LN17	41.71	44.89	39.20	44.9	33.36	27.35	30.7	38.43	39.81	48.04	40.24	43.78	39.37	35.83
LN18	33.35	34.48	31.42	32.69	18.64	17.61	17.85	24.30	30.26	40.68	27.72	27.19	28.02	25.50
LN22	28.74	28.39	22.91	21.7	19.42	15.47	19.47	22.23	23.4	26.42	28.68	26.02	23.57	21.45
LN23	40.61	37.64	31.89	35.06	32.32	24.54	33.82	34.43	39.59	40.14	40.04	37.14	35.60	32.40
LN24	33.64	29.17	25.05	20.02	17.99	14.71	15.95	17.95	21.49	23.03	28.33	27.78	22.93	20.86
LN25	38.86	35.02	27.15	29.86	27.35	20.65	28.67	30.86	30.99	-	37.94	32.43	30.89	28.11
LN26	27.31	27.44	21.11	20.47	16.34	13.47	16.5	20.43	34.97	23.86	24.26	25.75	22.66	20.62
LN27	36.66	37.43	27.91	28.78	25.67	21.40	27.78	30.66	20.69	36.62	34.17	34.94	30.23	27.51
LN28	53.75	44.24	43.53	47.39	51.55	37.46	50.47	51.32	47.65	45.13	46.73	41.92	46.76	42.55
LN52	51.44	54.12	52.81	66.82	43.39	39.05	40.46	48.29	57.03	67.96	41.49	39.70	50.21	45.69
LN53	43.57	41.17	37.26	34.99	31.69	28.47	37.44	37.92	32.39	37.17	42.56	36.02	36.72	33.42
LN54	20.19	48.63	33.52	31.68	35.98	28.38	40.45	39.08	32.1	34.35	39.01	37.33	35.06	31.90
LN55	46.82	39.58	29.79	34.55	32.62	26.07	40.23	36.99	29.62	36.60	28.4	32.74	34.50	31.39
LN56	44.80	43.36	35.10	29.69	32.43	24.88	32.92	34.62	31.61	29.25	40.74	37.99	34.78	31.65
LN57	41.39	40.14	37.66	29.86	32.82	24.98	33.73	28.75	32.86	34.66	38.48	32.22	33.96	30.91
LN58	40.44	35.45	35.63	33.99	35.3	26.73	33.86	27.53	35.33	34.55	41.27	27.63	33.98	30.92
LN59	44.75	41.86	28.31	31.61	35.32	28.49	33.66	28.51	36.74	36.23	36.02	33.06	34.55	31.44
LN61	51.91	53.41	45.81	50.02	39.9	41.19	37.75	43.39	53.08	54.80	45.07	44.61	46.75	42.54
LN62	60.23	50.53	43.72	52.42	38.14	35.53	40.1	56.35	-	48.21	43.43	45.16	46.71	42.51
LN63	50.92	39.96	44.66	51.89	43.37	31.37	40.42	44.96	49.08	49.45	50.66	45.69	45.20	41.13
LN64	42.44	44.83	20.98	39.64	30.93	23.79	26.29	29.37	36.21	49.81	45.44	36.41	35.51	32.32
LN65	37.94	36.02	31.19	30.6	24.2	20.18	20.93	-	25.36	34.30	27.04	20.93	28.06	25.54
LN66	62.37	46.53	42.86	42.75	40.92	33.33	39.21	32.30	37.86	38.39	41.81	33.56	40.99	37.30
LN67	51.13	50.50	47.48	54.24	41.96	33.31	46.18	49.45	55.35	55.37	45.43	44.67	47.92	43.61
LN68	42.75	43.88	37.10	37.92	29.27	27.50	32.76	31.34	35.89	36.29	38.56	34.20	35.62	32.41
LN69	43.58	43.25	33.25	33.19	27.37	23.41	26.1	28.33	34.25	37.96	31.54	25.84	32.34	29.43
LN70	39.74	33.93	36.01	38.36	29.78	26.93	32.92	30.42	29.53	36.00	37.43	36.02	33.92	30.87
LN71	37.68	31.88	34.43	31.84	28.13	22.88	27.15	-	26.28	38.08	33.72	29.70	31.07	28.27
LN72	40.18	33.71	23.73	32.8	24.03	22.11	29.25	-	30.08	28.38	32.5	28.04	29.53	26.87
LN73	50.86	40.72	41.69	45.91	33.34	31.34	39.63	42.01	42.13	39.87	42.31	-	40.89	37.21
LN74	47.02	46.96	44.43	41.89	-	33.24	43.15	47.08	45.39	42.11	40.36	43.86	43.23	39.34
LN75	50.55	50.99	34.61	45.45	36.63	32.10	37.94	40.32	44.98	44.20	42.07	37.73	41.47	37.73
LN76	42.64	39.27	34.29	43.52	27.25	24.43	27.09	30.80	34.74	39.98	29.85	27.48	33.45	30.44
LN77	49.33	45.71	36.71	40.04	34.89	22.65	38.09	38.63	38.32	37.07	40.48	39.55	38.46	34.99

WHAT SHOULD BE MEASURED: The TOTAL NUMBER OF BREACHES/ i.e. peaks - is the sole thing that establishes Air Quality Objective exceedance overall. Since it is based upon how many times a pollutant peaks past the legal limit in certain time periods in one year. Since pollution measurements can vary depending upon seasonal temperatures, it is necessary to gather data for one entire year minimum, though preferably more.

Luton Council and London Luton Airport Operations Limited do not report the raw data, showing the exact breaches nor their number. Instead they calculate general averages which remove the peaks; i.e.; the exact the opposite of identifying exceedances. People will wrongly assume that there were no peaks – since this was intentionally disguised. It is understood from a Council source involved within the Airport, the Council absolutely know they are breaching air quality regulations consistently and try to hide the fact, because the Airport is too lucrative.

LBC also omits carbon monoxide from its annual report. When describing what it should measure it avoids the “small matter” of carbon monoxide plus all the other things like NOX and other PMs:

Air Quality Annual Status Report (ASR) June 2016 - In fulfilment of Part IV of the Environment Act 1995 - Local Air Quality Management;

Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England Pollutant

Pollutant	Air Quality Objective ⁴ Concentration	Measured as
Nitrogen Dioxide (NO ₂)	200 µg/m ³ not to be exceeded more than 18 times a year	1-hour mean
Nitrogen Dioxide (NO ₂)	40 µg/m ³	Annual mean
Particulate Matter (PM ₁₀)	50 µg/m ³ , not to be exceeded more than 35 times a year	24-hour mean
Particulate Matter (PM ₁₀)	40 µg/m ³	Annual mean
Sulphur Dioxide (SO ₂)	350 µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO ₂)	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO ₂)	266 µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean