

Written Statement – session R6 – Air Quality

This statement from the Coordinating Team is divided into the following sections:

Section	Paragraphs
Inspector's Questions	4-5
Background - Regulatory Position	6-14
Background - NPPF	15-18
Background - Integrated Transport Strategy	19-25
Air Quality - AQMA, AQAP, AQO & hot-spots	26-34
Air Quality - Progress	35-51
Comment - Allington Waste Management Facility	52-59
Comment - Monitoring	60-64
Comment - MBC's Approach	65-68
Comment - MBC's Planning Values	69-76
Conclusions	77-96
Summary	97-99

1. We offer outline answers to the Inspector's published questions.
2. We then draw together the analysis that informs our views.
3. Attachment 5 (Air Pollution – definition & limits) is offered as a quick reminder of sources of air pollution and of objectives to improve Air Quality.

Inspector's Questions

4. Numbering is the Inspector's.

Question	Comment
QnR5.1 Has Maidstone BC commented on the consultation or does it intend to do so?	No comment, other than, if MBC has, we have not seen it and, if they have not, why not?
QnR5.2 How does MBC intend to respond to the Government letter?	No comment, other than MBC's response is awaited with interest.
QnR5.3 Should the possibility of designating a Clean Air Zone be referred to in the Local Plan whether as an alternative to, or in addition to, the Low Emission Strategy and alongside the references to investigation of the Leeds-Langley Bypass?	Given the timing of this Local Plan, the recent High Court judgement (<i>ClientEarth v SoS EFRA, [2016] EWHC 2740</i>) (ORD047), the letter from DEFRA (ED075A) and the discretionary power of the Government to require MBC to contribute to any infraction fine resulting from EU legal action, it would be difficult to understand why the eventually adopted Local Plan should not review this possibility and, for at least part of our Borough, to set in motion the action to establish a Clean Air Zone.
QnR5.4 Has MBC drafted a revised policy DM5?	At present, policy DM5 merely refers to when development will be permitted. That policy is being revised by MBC, but it needs not only to take account of the Government letter, but in order better to reflect the points made in paragraphs 17.35 – 17.41 of the submitted plan (and in paragraph 17.38 in particular), many of which do not carry through to the formal policy statement.

<p>QnR5.5 Having regard to the above Planning Practice Guidance are the monitoring targets in relation to air quality adequate or should there be monitoring against a defined baseline or to the limits set out in the EU directive or national regulations?</p>	<p>Yes, there should be monitoring against a defined baseline or limits set out in EU Directives, with the current baseline noted so that the scale and pace of progress towards attaining regulatory levels can be seen by all.</p> <p>As drafted, policy DM5 allows considerable “wriggle room”, for instance, “minimised and mitigated”, “mitigation measures which are locationally specific and proportionate to the likely impact”.</p> <p>Exploitation of that “wriggle room” should be made visible and reviewed independently of MBC Officers.</p>
<p>QnR5.6 How is the Air Quality Action Plan being monitored?</p>	<p>We await MBC’s answer with considerable interest. We trust that it will contain substance and not aspirations.</p>
<p>QnR5. Is there any evidence of a reduction in Nitrogen Dioxide levels in the AQMA or at the air exceedance locations in the 6 years since the Action Plan was adopted?</p>	<p>We would welcome sight of relevant statistical trends, but, by inspection, published statistics do not lend themselves to a conclusion that reduction has been achieved.</p>
<p>QnR5.7 Does the Air Quality Action Plan require updating and, if so, when will that be done?</p>	<p>In the light of the briefing in the Inspector’s Agenda, the answer must surely be “yes”.</p> <p>And that assumes that the submitted Local Plan will be appropriately updated to give effect to the need to drive towards meeting regulatory requirements, not just “mitigating” the adverse impact of new developments.</p>
<p>QnR5.8 Does the reasoned justification to Policy DM5 require amending to make clear how and where the scale of relevant development that may have air quality impacts and the associated need for mitigation will be defined?</p>	<p>Yes.</p> <p>However, “mitigation” is in the eye of the beholder and, unless absolute regulatory requirements are recognised and mandated, that “eye” will be focused on delivering Five Years’ Housing Supply and the trajectory for the OAHN.</p> <p>Vehicle and fuel technology has delivered considerable advances in terms of emission reduction and that will no doubt continue, with some contribution from electric vehicles.</p> <p>While a very modest contribution from modal shift might be expected, the reality is that scope for that to make a significant positive impact is minimal.</p> <p>The only real contribution will come from “less new homes” and hence less people and less vehicles.</p> <p>As we contend, the current OAHN has been seriously over-estimated and a review and reduction in that figure will be the only serious contribution towards slowing a worsening in air quality, thereby giving time for technology to come to the rescue, perhaps assisted by mechanisms such as a Clean Air Zone.</p> <p>There are particular parts of our Borough where “enough is enough”, The OAHN should be recalculated and those parts receive a major share of the derived reduction in OAHN.</p>
<p>QnR5.9 Would the above ITS parking actions make any contribution to reducing</p>	<p>Probably “yes”, compared with “no action”. However those actions miss the point.</p>

<p>congestion or the air quality impacts of transport in the foreseeable future?</p>	<p>Our County Town is diminishing as a retail attraction. The reality is that getting into the town centre is not easy and, once there, and what was said at the Transport Session about “ already sufficient parking capacity to support a significant increase in vehicle flows” is patently incorrect. Parking is, and for years has been, a major issue in Maidstone that deters optional visits.</p> <p>As for increasing (long stay) parking charges by 50%, one cannot but view that as a cynical revenue-raising measure, which would then be followed by price escalation at private car parks, to the detriment of optional visits to boost town centre economy.</p> <p>We want people to be able to work (and, hence, many of them to park) in the town centre and for visitors to be able to park, especially those spending money in our town centre economy.</p> <p>While we cannot, therefore, become “anti-car”, there is a need to limit the growth in cars, while existing air quality, park-and-ride capacity issues are addressed.</p> <p>The most effective way to do that is to limit development in the worst affected parts of our Borough.</p> <p>As such, the “Integrated Transport Strategy” is neither a strategy nor integrated. It offers only piecemeal initiatives in the face of a strategic problem that has been with our Borough for some years and is now set to get worse.</p>
<p>QnR5.10 Does what the High Court describes as the urgent need for measures to address the current infraction of Nitrogen Dioxide pollution limits require more radical measures to encourage modal shift for journeys into Maidstone town centre so as to reduce the number of vehicles entering the town from both existing and proposed development?</p>	<p>We just do not believe that modal shift is the answer. Much more modal shift is not feasible, especially given the backward steps on park-and-ride.</p> <p>The existing park-and-ride bases provide services for people travelling to/from work or into Maidstone for meetings or small amounts of shopping (although operating hours are restrictive). However, they are simply not capacious enough to enable people to carry their weekly shopping or bulky items. For these, the car remains the essential mode of transport.</p> <p>For buses to be the answer, there must be the infrastructure and facilities for them to operate effectively from the perspective of users of the service. As previous sessions of the examination have established, this simply is not present in Maidstone, nor will the measures proposed in the plan be effective. Please see also our comments on Qn5.11.</p>
<p>QnR5.11 In particular, given the concentration of development close to a high frequency bus route in South East Maidstone, should the current Local Plan’s bus lane proposal be reinstated along Sutton Road as a firm plan policy in order to encourage modal shift to a more reliable and (low emission) bus service to the</p>	<p>The nature of the planned houses would not support the argument that there would be a propensity amongst that new population to use buses.</p> <p>Feasibility of a meaningful bus lane must stretch credibility when the characteristics of the route are examined from those prospective new developments into the centre of town. And especially if road (and pavement) capacity has to cater for “normal” traffic lanes, bus lane, cycle path and (safe) pedestrian facilities.</p>

town centre and to Maidstone East railway station?	In particular, a through bus-lane to Maidstone East would prove a challenge, given pinch-points en route. It could well have adverse impact on other supposed traffic improvements or upon essentially pedestrianised parts of the town centre. MBC appears to be fixated by unrealistic modal shift, but probably in common with many other Authorities.
QnR5.12 Would the potential benefits from modal shift for improved air quality and reduced congestion outweigh the loss of part or all of the grass verge in Sutton Road?	While we are not experts on the beneficial impact of vegetation on air quality, it would appear to be somewhat regressive to intensify urbanisation by tarmacking over green verges. It would certainly have a deleterious impact on visual amenity and damage the “experience” for any cyclists or walkers, as well as local residents.
QnR5.13 As Countryside Properties have given evidence that they would only be able to implement allocation H(10) Land South of Sutton Road at a rate that would deliver about 650 out of 800 dwellings within the plan period, should that 800 allocation be reduced by 100-200 dwellings in order to accommodate a park and ride site within the H1(10) allocation that would also make use of the above bus lane?	With or without bus lane measures, that is an interesting proposition, provided it does not add to urban spread by encroaching into rural areas. It might persuade drivers from further afield to use it and avoid town centre parking charges, but only if park-and-ride charges were sufficiently modest and the operational arrangements user-friendly. Should this be taken forward, we strongly recommend that the Borough achieves freehold of the site.
QnR5.14 Should the Local Plan commit to identifying additional park and ride locations to the north and south of the town as proposed in earlier drafts?	Yes, but on a freehold / <u>very</u> long lease basis, rather than a short-term lease that may then be followed by development by the freeholder on what would then be a previously developed site. That is, used by the owner as a device to achieve eventual planning permission.
QnR5.15 Should the creation of additional park and ride spaces be matched by a reduction in long stay car parking in the town centre notwithstanding the ITS commitment to maintain the present number?	No. As we note above in our comment on QnR5.9, parking is, and for years has been, a major issue in Maidstone that deters optional visits that bring money into our economy

5. Below we summarise the evidence and analysis that has informed our views.

Background - Regulatory Position

6. The DEFRA Web Site states that:

Since December 1997 each local authority in the UK has been carrying out a review and assessment of air quality in their area. This involves measuring air pollution and trying to predict how it will change in the next few years. The aim of the review is to make sure that the national air quality objectives (PDF) will be achieved throughout the UK by the relevant deadlines. These objectives have been put in place to protect people's health and the environment.

7. The Schedule to the Sustainable Communities Act 2007 states:

MATTERS TO WHICH LOCAL AUTHORITIES MUST HAVE REGARD
..... (k) *measures designed to increase community health and well being,*

While “regard” leaves scope for considerable interpretation, an ethical authority would, presumably, give it close attention and far from zero weight.

8. That is a clear obligation relating to air quality improvement.
9. In its 29 April 2015 judgement on *ClientEarth v Secretary of State for the Environment, Food and Rural Affairs*, the Supreme Court, at paragraph 31, stated: “The new government, whatever its political complexion, should be left in no doubt as to the need for immediate action to address this issue”.
10. In DEFRA’s September 2015 “Draft Air Quality Plan for the achievement of EU air quality limit value for nitrogen dioxide (NO₂) in South East (UK0031)”, there are 34 “measures” to be pursued by MBC, 15 of them with the classification “Traffic planning and management”.
11. As the Inspector’s agenda for the session has noted, the recent High Court judgement will raise a challenge in terms of the urgent need for definitive, effective and timely actions. (*ClientEarth v SoS EFRA, [2016] EWHC 2740*) (ORD047).
12. “Air Quality” is currently attracting considerable media coverage, nationally and internationally.
13. Alongside that should be added the issue of “noise”.
- a) Traffic noise is the most serious type of noise pollution. Exposing the human ear to it can cause hearing problems, stress, poor concentration, fatigue through lack of sleep and a loss of psychological well-being.
 - b) Noise induced hearing loss is irreversible damage to the ears caused by exposures to high levels of noise over approximately 80 dB. Noise levels of 93.3dB have been measures on the M20 (Junction 8 to Junction 9).
 - c) Excessive concentrations of development, generating even more traffic on main routes, would exacerbate any current problems.
14. This indicates that “noise” should be monitored at potentially vulnerable parts of the Borough, if only to reassure local residents, and, if that reassurance is not forthcoming, to place pressure on implementation of remedial measures.

Background - NPPF

15. Paragraph 120 states: “To prevent unacceptable risks from pollution and land instability, planning policies and decisions should ensure that new development is appropriate for its location. The effects (including cumulative effects) of pollution on health, the natural environment or general amenity, and the potential sensitivity of the area or proposed development to adverse effects from pollution, should be taken into account. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner”.
16. That paragraph presumably places an obligation upon MBC’s Planning Committee.
17. Paragraph 124 states: “Planning policies should sustain compliance with and contribute towards EU limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and the cumulative impacts on air quality from individual sites in local areas. Planning decisions should ensure that any new development in Air Quality Management Areas is consistent with the local air quality action plan”.

18. Our Borough does not meet current regulatory standards, so the requirement must be somewhat more challenging than “sustain compliance”; compliance needs to be achieved.

Background - Integrated Transport Strategy

19. MBC's ITS does not address the horrendous congestion that Maidstone has suffered for years, to the detriment of its standing as the County Town and to its air quality.
20. Main concerns are:
 - a) it does not address current congestion;
 - b) the bus element of modal shift is not “joined-up” with a realistic park-and-ride network;
 - c) a mooted Sutton Road bus-lane (not supported by KCC) would make matters worse for cyclists and pedestrians, given that verges would be eaten into and separation from vehicles would reduce;
 - d) construction of continuous bus-lanes is extraordinarily difficult in Maidstone;
 - e) extensive walking and cycling is just not realistic, given the distances involved and the topography of the area i.e. a lot of hills; and that is especially the case for those who are not physically capable, or as capable as they used to be, of such activity or when carrying substantial items;
 - f) traffic mitigation measures for future housing developments are not only piecemeal and probably far from 100% mitigation, but are also disputed by KCC; and
 - g) the highway / public transport / pedestrian environment / cycle provision improvements in the Infrastructure Delivery Plan come with a significant cost, but some “unknown”, and to-be-confirmed funding sources.
21. It does not include the so-called Leeds-Langley relief road, which, presumably, would deflect a proportion of Sutton Road usage, including that generated by the 2,600 new homes planned to appear along that road. That would be a nationally significant infrastructure project, taking considerable funding and time to materialise. Is it, on balance, desirable? Is it deliverable?
22. While the Coordinating Team does not have a view on any relief road's potential merits or derived new problems, there is a concern that, if built, development would then spread out to, and perhaps beyond, it and exacerbate current traffic / air quality concerns derived from that additional population and hence traffic flows.
23. If carried forward, would that relief road add to air quality issues in that part of our Borough?
24. Should the relief road be progressed, should it be accompanied by Green Belt either side of it to deter subsequent spread of development and emergence, once more, of significant traffic issues, including air quality issues? Or, at least, should a “Landscape of Local Value” designation be declared?
25. Such a measure would ensure an element of “green lung” to mitigate further damage to air quality.

Air Quality - AQMA, AQAP, AQO & hot-spots

26. An Air Quality Management Area (AQMA) for Maidstone was declared in August 2008 – please see Attachment 1 for geographical extent. Maidstone's AQMA is not the whole of the Borough, but, understandably, is focused on the urban area.
27. The DEFRA Web Site lists all Air Quality Management Areas (AQMAs) – please see <https://uk-air.defra.gov.uk/aqma/list>. Attachment 2 is an extract and shows the number of AQMAs by authority and includes:

Maidstone	1
Tonbridge & Malling	7
Tunbridge Wells	1
Swale	4
Medway	3
Sevenoaks	11

28. The above figures indicate that other authorities have taken this more seriously and/or have used a more granular approach that might facilitate meaningful localised action plans. It is also noticeable that Sevenoaks and Tonbridge & Malling were somewhat quicker off-the-mark than MBC.
29. An Air Quality Action Plan (AQAP) (ORD045) was published in 2010 in order to identify measures and actions required to manage air quality within Maidstone's AQMA.
30. It noted, unsurprisingly, the main source of air pollution in our Borough to be emissions due to traffic flows and congestion on key areas within the local road network, notably the M2, M20, A20, A229, A249, A26 and A274.
31. It listed five hot-spot areas as exceeding the annual mean objective for NO₂, with two further potential exceedances of the annual NO₂ mean and two further sites under investigation for exceedance of the hourly objective, summarised in the table below.
32. To reduce pollutant levels below the Air Quality Objective (AQO) levels required by European legislation, this AQAP estimated the required reductions of pollutant to meet the AQO for the five confirmed hot-spots.
33. The situation at AQAP publication is summarised in the table below.

Location	Required NO ₂ reduction / comment
Hot-spots - exceedances of the annual NO₂ mean	
Town Centre area, including the High Street and Upper Stone Street (a street canyon)	41 - 88% reduction
Loose road / Sutton Road ("Wheatsheaf") junction	51% reduction
Tonbridge Road and Fountain Lane junction	4.8% reduction
Well Road / Boxley Road Junction	(Recently fallen 1% below the exceedance level, but any small changes in traffic flows in the area would re-instate its AQO failure)
M20 J6-7 junction	8.8% reduction
Potential exceedances of the annual NO₂ mean	
A229 Chatham Road	where data to date suggest that a 25% reduction in NO ₂ concentrations is required to achieve the AQO
Wildfell Close, Walderslade (adj M2)	data monitoring ongoing
Exceedance of the hourly objective	
Upper Stone Street	under investigation
Loose Road / Sutton road (Wheatsheaf) Junction	under investigation

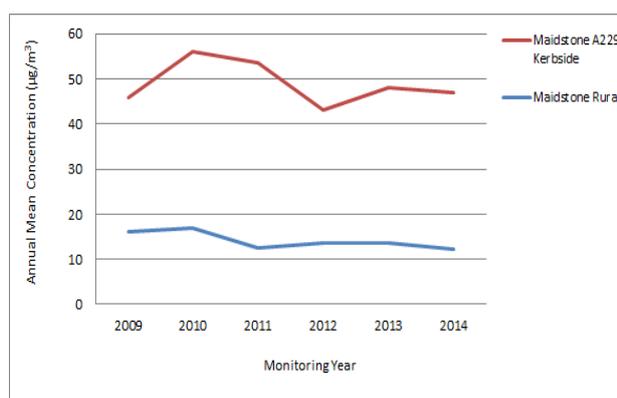
34. Some of those hot-spots are dramatically above regulatory levels, requiring reductions that demand radical action.

Air Quality - Progress

35. MBC published its Updating and Screening Assessment in 2015 (the “Assessment”), as an update to the 2013 version. It was prepared by its consultants, Bureau Veritas.
36. Paragraph 1.1 includes “Maidstone is subject to significant commuting into and out of the town, as well as an influx of school children, shoppers and tourists, and suffers from significant congestion especially on the approach roads to the town centre at peak hours. Other pollution sources, including commercial, industrial and domestic sources, also make a contribution to background pollution concentrations”.
37. “Significant congestion” is clearly identified as the main contributor to current breach of air quality requirements.
38. The Assessment states that MBC operates two automatic monitoring stations:
 - the A229 Bridge Gyratory, which measures NO₂ and PM₁₀ and is next to a main road, within the AQMA; and
 - the rural background site in Detling is outside the AQMA, which measures NO_x, PM₁₀, sulphur dioxide (SO₂) and ozone (O₃).
39. It also notes that, since the Updating and Screening Assessment in 2009, no changes have taken place to the automatic monitoring network
40. Attachment 3 lists 55 monitoring “diffusion tubes” and their annual readings from 2009 – 2014. The highlighting is ours.
41. As a coarse summary of that list, the operational tubes exceeding, or very close to exceeding, the limit in each year are:

	2009	2010	2011	2012	2013	2014
Exceeding NO ₂ annual mean AQS objective of 40µg/m ³	12	12	15	8	13	15
Between 35 – 40µg/m ³	6	6	5	9	11	9

42. The Assessment presents the trend at the two automatic monitoring stations. (Please see chart).
43. While the rural site is expectedly low, the “urban” site is stubbornly and substantially in excess of limit.
44. Some tubes were added and, judging by the tube naming scheme, almost 40 sites were removed as the period progressed.
45. That implies that funding was restricted so that additional tubes were not affordable, and some were recovered and re-sited to new locations.
46. Between the 2013 Updating and Screening Assessment and the 2015 version, some sites were removed, of which one (Maid 25) exceeded, or nearly exceeded, the limit in the period up to 2012 and the other (Maid 55) substantially exceeded the limit throughout. The explanation may be perfectly reasonable, but it challenges confidence in rigour and continuity of monitoring and reporting and, in particular, may challenge the re-siting of tubes between sites, rather than provision of new tubes.



47. Paragraph 6.1 of the Assessment contains the table for biomass installations:

Installation	Comment
Ewell Manor, Ewell Lane, West Farleigh. Coppice Wood burner (571281, 152745) – the nearest residential exposure is 30m from the installation	Details of the installation are not yet available as it has not yet been decided what boiler to purchase.
Smiths Hall, Lower Road, West Farleigh, Maidstone. Wood Chip burner with a thermal output of 100kW (571343, 152610) – the nearest residential exposure is 76m from the installation	Assessment will be undertaken when actual emissions data is available for this installation.
Little Addlestead, Yalding (570420,148834) – the nearest residential exposure is 60m from the installation	Assessment will be undertaken when actual emissions data is available for this installation.
Elmscroft House, Charlton Lane, West Farleigh (57235, 152868) – the nearest residential exposure is 25m from the installation	Assessment will be undertaken when actual emissions data is available for this installation.
Planning application 13/0819 - The Stumps, Lenham Road, Kingswood, ME17 1LX (584473, 150655)	Assessment will be undertaken when actual emissions data is available for this installation.
Planning application 13/1316 - Pinkhorn Green Farm, Tattlebury Lane, Headcorn, TN27 9JU (582881, 145536)	Assessment will be undertaken when actual emissions data is available for this installation.

48. It is to be noted that the top four sites were reported in the 2013 assessment as:” At this current time no further information is available regarding the installations. All are located in rural areas. Maidstone Borough Council will review these installations in the next Updating and Screening Assessment”.
49. The 2015 Assessment states: “Although it has been possible to obtain some information for the Smiths Hall, West Farleigh and Elmscroft House, Charlton Lane boilers, the data is not sufficient to undertake a screening assessment. At this current time no further information is available regarding the installations. Maidstone Borough Council has made several attempts to collect data and is still working to obtain the missing information. Once the data is available an assessment will be undertaken to determine if emissions from the boilers are likely to cause an exceedance of the air quality objectives, the results of which will be reported in the next LAQM report”.
50. Presumably that situation must be cured before the next Assessment. Has MBC the necessary powers to enforce collection and/or provision of data? If not, who has?
51. The Assessment’s overall conclusion is, in essence, carry on monitoring and prepare the next report.

Comment - Allington Waste Management Facility

52. This facility would appear to be located just outside Maidstone’s AQMA.
53. It disposes of 500,000 tonnes per annum of waste and has the ability to generate 40Mw of power.
54. It emits various gases and particles that could compromise air quality.
55. From the perspective of air quality and human health, these are addressed by various measures, including an 80 metres high chimney and, presumably, filters.

56. We cannot find evidence that air quality around that site is monitored and reported publicly, in cooperation with neighbouring authorities.
57. Should maintenance and efficacy of the above measures not be sufficient, it is not clear how MBC would be alerted.
58. Given its concerns with the above biomass installations and housing developments along the nearby Hermitage Lane, including by Tonbridge & Malling, it is assumed that, if there is a gap in monitoring, it should be remedied.
59. That is especially relevant as Maidstone Hospital is only some 2,000 metres away.

Comment - Monitoring

60. Paragraph 3.6 of the Assessment states: "Maidstone Borough Council confirms that there are no new/newly identified roads with significantly changed traffic flows". That is about to change substantially, perhaps particularly in the South-East and North-West of the Borough.
61. Some minor roads, and their junctions with main roads, used for (increasing) "rat running", may merit monitoring.
62. On the face of it and given that:
 - a) we are not aware of any meaningful MBC mitigation measures;
 - b) further engine technological improvements may take some time;
 - c) electric vehicles will have an effect, but of uncertain magnitude and timing;
 - d) LPG-powered buses are not a significant proportion of overall traffic; and
 - e) more houses, and hence more cars are on our roads,

the situation is likely to worsen - perhaps substantially.
63. MBC does not give this subject the profile, resources and concerted attention that it clearly merits.
64. There has to be monitoring to assess the scale and extent of the problem, but that needs to be followed by realistic, sustained measures to ameliorate the known problem.

Comment - MBC's Approach

65. We note that:
 - a) MBC recognises that a key local issue is "Improvements to quality of air within the air quality management area (AQMA)";
 - b) part of the Town Centre vision is "Tackling congestion and air quality issues through improvements in provision for vehicles, pedestrians and cyclists, including public transport";
 - c) many of the DM policies in the Local Plan contain the statement: "Appropriate air quality mitigation measures to be agreed with the council will be implemented as part of the development";
 - d) there is Key Monitoring Indicator 9: "Performance indicators: Delivery of transport air quality initiatives and changes in air quality in Air Quality Management Areas"; and
 - e) there is reference to policies: DM24 (Sustainable Transport), DM25 (Public transport), DM26 (Park and ride sites) and DM5 (Air Quality) and it states targets:
 - delivery of transport schemes listed within the Integrated Transport Strategy and those proposals required in association with developing allocated sites;
 - 100% of applications to submit a travel plan in accordance with the threshold levels set by Kent County Council's Guidance on Transport Assessments and Travel Plans;

- 100% of applications which likely to have a negative impact on air quality within or adjacent to an Air Quality Management Area to provide an Emissions Statement identifying how these emissions will be minimised and mitigated; and
 - 100% of applications in or affecting Air Quality Management Areas or of a sufficient scale to impact local communities incorporate mitigation measures which are locationally specific and proportionate to the likely impact.
66. Minimisation and mitigation are prominent aspirations, but they are “in the eye of the beholder” and prone to sacrifice in pursuit of development delivery against the very large OAHN and employment targets.
67. There is no firm target against which performance towards improving air quality is measurable. We often hear reference to bats, other wildlife, loss of trees and hedges etc at Planning Committee meetings, but we have seldom heard about “air quality” and just cannot recollect reference to AQMA and its hot-spots. Air quality is just not high up MBC’s agenda when confronted with a rush for development.
68. We have witnessed the removal of trees, including from the town centre, and any Sutton Road bus lane would remove green verge, but we see little sign of endeavours to enhance air quality through “vegetation”, with the side-benefit of enhanced visual amenity and enjoyment for any cyclists and walkers.

Comment - MBC’s Planning Values

69. The Maidstone Local Plan allocates some 3,300 dwellings feeding onto the A274 and some 2,200 feeding on to the A229, which join together at the Wheatsheaf junction, an air quality “hot-spot” in the AQMA and requiring a 51% improvement in air quality according to the Maidstone Air Quality Action Plan.
70. These new allocations will generate an enormous amount of additional traffic pressure on these roads and junction, amounting to around 3,800-4,200 journey-to-work round-trips, according to the commuting patterns shown in the 2011 Census.
71. Little or no consideration has been given by MBC to cumulative air quality impacts in the consideration of planning applications that implement these allocations.
72. Nor does, as noted above, the plan have an effective or credible transport strategy, yet road traffic is the major source of air pollution and its increase is offsetting any improvements from cleaner fuels and technology (see Kent and Medway Air Quality Partnership Air Quality and Planning Technical Guidance July 2011, paragraph 1.1).
73. This approach by MBC is clearly contrary to the NPPF, which makes clear that planning policies and planning decisions need to take into account the effects (including cumulative effects) of pollution on health and the potential sensitivity of an area to adverse effects from pollution (paragraph 120), and sustain compliance with EU limits and the cumulative impact on AQMAs (paragraph 124).
74. In addition, MBC is a member of the Kent and Medway Air Quality Partnership and has failed to follow the partnership’s, presumably jointly agreed, planning requirements. Please see Page 11, section 4 of::

http://www.kentair.org.uk/documents/K&MAQP_Air_Quality_Planning_Guidance_Mitigation_Option_A.pdf

75. It states:

“An overriding consideration will be to ensure that the air quality in existing AQMAs does not worsen by the introduction of a development and/or that there is no additional air pollution burden from a development(s) which could create new AQMAs”; and

“Refusal of a planning application may still result if air quality impacts from a development remain, even after all reasonable means to mitigate the impacts on air quality have been exhausted”.

76. It continues that, if the magnitude of change (deterioration) in air quality is ‘very high’, applications are likely to be refused, or, if ‘high’, refused unless significant mitigation measures are implemented. (Please see further detail in Attachment 4).

Conclusions

Current Status

77. This is clearly a complex problem, for which technology has already provided partial remedies and is likely, over time, to provide more.
78. However, our Borough has a real current problem, with a number of exceedance areas,
79. The overall AQMA, and the exceedance areas in particular, will not be improved against regulatory requirements by the currently proposed Local Plan.

Compounding the Problem

80. The main cause is the number of proposed new homes that will give rise to more people and hence more cars.
81. That is accentuated in certain parts of our Borough, particularly the development proposals for South-East Maidstone and along Hermitage Lane. The former adds stress to already stressed infrastructure, including exceedance areas. The latter has an impact on exceedance areas (including one just over our Borough’s border at Watlingbury) and is complicated by possible developments within Tonbridge & Malling.

Planning Process

82. MBC’s current action is only “monitoring”; planned remedial actions are limited or non-existent.
83. MBC is showing complete disregard for its assumed commitment to the conclusions of the Kent and Medway Air Quality Partnership, including when to refuse applications.
84. There is no evidence of “cross-border” review of “air quality”, notwithstanding the Duty to Cooperate. That is despite one exceedance area in Tonbridge & Malling being just over the border on the A26 at Watlingbury and, as a result of MBC’s Local Plan, about to be stressed even further by increased traffic flows to/from Hermitage lane and elsewhere passing through the Watlingbury traffic lights

Modal Shift

85. Modal shift aspirations are laudable, but delivery is highly problematic, especially given:
- a) a lack of realistic park-and-ride facilities, with:
 - i. proper geographical spread so that all main access routes to the town centre are included;
 - ii. enhanced, commercially sustainable bus services, with user-friendly timetables, frequency and pricing;
 - b) distances and topography not encouraging cycling and walking; and
 - c) rail station car-parks being very inadequate (with current detrimental impact on local residents and road capacity).

Monitoring

86. Monitoring seems to be taken as a “box to be ticked”.
87. There is concern that technical facilities are limited, with questionable continuity at potentially vulnerable sites.

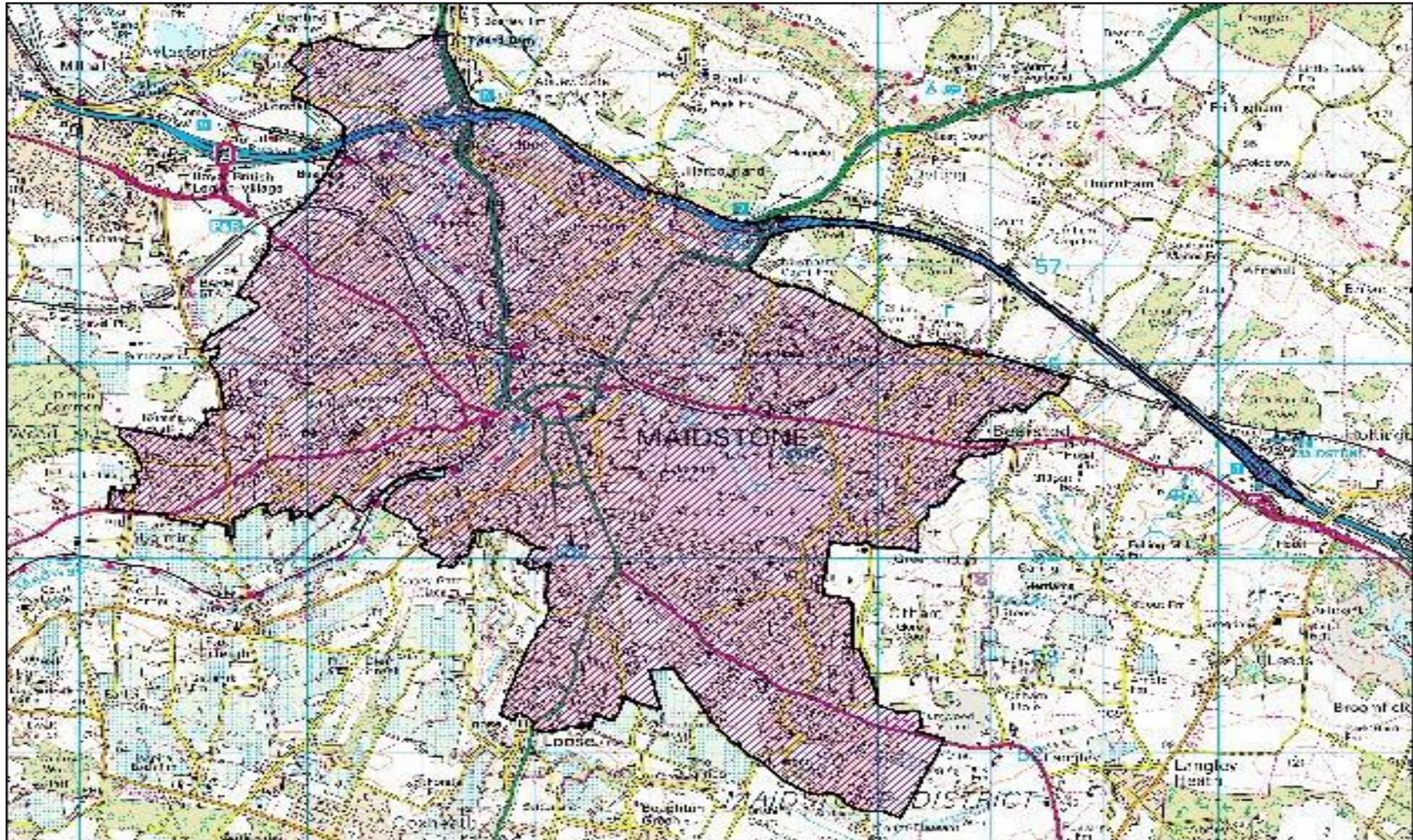
88. Considerably more monitoring stations, including automatic stations, need to be installed and, once installed, they need to remain in position so that the monitoring population is only ever added to, not reduced. Continuity and enhanced frequency of monitoring and reporting is essential, if only for confidence-building amongst residents.
89. As it stands, current monitoring apparatus is unable to reflect the situation “on the ground” against increased quality standards.
90. Besides Air Quality, “Noise” should become a subject of monitoring and remediation.

Way Forward

91. A lesson should be taken from the Federal legislation in the USA, Clean Air Act 1970, as amended, which lays down comprehensive standards and permits a local community to hold the authority to account.
92. Monitoring of air quality needs to be extended, maintained and reported more frequently; and monitoring extended to “noise”.
93. There needs to be clear, personal accountability at Director-level within MBC to advance air quality remedial measures. That Director should report to a dedicated MBC committee, including interested and knowledgeable Borough Councillors and an equal number of Parish representatives, with the latter appointed by Maidstone KALC.
94. MBC should re-confirm its commitment to the recommendations from Kent and Medway Air Quality Partnership about when an application should be refused – and then adhere to it.
95. The one measure that would have a positive impact in terms of restricting deterioration in the current situation would be to reduce OAHN. Reducing OAHN is warranted and feasible, using Government approved guidelines (NPPG), with various constraints, including air quality, then factored in.
96. Failing that, a proportion of the Government’s OAHN and Five Years’ Housing Supply requirements should be ring-fenced and paused within vulnerable parts of our Borough until compliance is achieved with air quality regulations.

Summary

97. “Air quality” is a serious subject for the well-being of residents that warrants far more focus, vigilance and positive action than is in evidence.
98. Air quality, with its current national and international prominence, should be a valid reason to at least “pause” certain developments pending, and to support, air quality remediation.
99. The Government is currently judged to be errant against EU Directives and it should not compound the situation by forcing through massive housing development in areas that exacerbate air quality non-compliance.



Local AQMAs

ATTACHMENT 2

From DEFRA's Web Site (<https://uk-air.defra.gov.uk/aqma/list>)

Local Authority	AQMA Name	Pollutants	Date Declared
Maidstone Borough Council	<u>Maidstone Town AQMA</u>	Particulate Matter PM ₁₀ , Nitrogen dioxide NO ₂	01/08/2008
Tonbridge and Malling Borough Council	<u>Tonbridge and Malling - Aylesford AQMA</u>	Nitrogen dioxide NO ₂	01/10/2008
Tonbridge and Malling Borough Council	<u>Tonbridge and Malling - Ditton AQMA</u>	Nitrogen dioxide NO ₂	01/06/2005
Tonbridge and Malling Borough Council	<u>Tonbridge and Malling - Larkfield AQMA</u>	Nitrogen dioxide NO ₂	01/10/2008
Tonbridge and Malling Borough Council	<u>Tonbridge and Malling - M20 AQMA</u>	Particulate Matter PM ₁₀ , Nitrogen dioxide NO ₂	01/05/2001
Tonbridge and Malling Borough Council	<u>Tonbridge and Malling - Tonbridge High Street AQMA</u>	Nitrogen dioxide NO ₂	01/06/2005
Tonbridge and Malling Borough Council	<u>Tonbridge and Malling - Wateringbury AQMA</u>	Nitrogen dioxide NO ₂	01/06/2005
Tonbridge and Malling Borough Council	<u>Tonbridge and Malling Borough Council Air Quality Management Area No 7 Borough Green</u>	Nitrogen dioxide NO ₂	01/04/2013
Tunbridge Wells Borough Council	<u>A26 AQMA</u>	Nitrogen dioxide NO ₂	29/12/2011
Swale Borough Council	<u>AQMA No 3 - East Street, Sittingbourne Kent</u>	Nitrogen dioxide NO ₂	28/02/2013
Swale Borough Council	<u>AQMA No 4 - St Pauls Street, Sittingbourne</u>	Nitrogen dioxide NO ₂	25/01/2013
Swale Borough Council	<u>AQMA2 - Ospringe St, Faversham, Kent</u>	Nitrogen dioxide NO ₂	19/05/2011
Swale Borough Council	<u>Newington AQMA</u>	Nitrogen dioxide NO ₂	01/05/2009
Medway Council	<u>Central Medway AQMA</u>	Nitrogen dioxide NO ₂	29/06/2010
Medway Council	<u>Gillingham AQMA</u>	Nitrogen dioxide NO ₂	29/06/2010
Medway Council	<u>Rainham AQMA</u>	Nitrogen dioxide NO ₂	29/06/2010
Sevenoaks District Council	<u>AQMA No. 5 Riverhead</u>	Nitrogen dioxide NO ₂	01/09/2006
Sevenoaks District Council	<u>AQMA No. 8 (Swanley Town Centre)</u>	Nitrogen dioxide NO ₂	01/09/2006

Local AQMAs

ATTACHMENT 2

Sevenoaks District Council	<u>AQMA No.1 M20</u>	Nitrogen dioxide NO ₂	01/09/2006
Sevenoaks District Council	<u>AQMA No.10 (Sevenoaks High Street)</u>	Nitrogen dioxide NO ₂	01/09/2006
Sevenoaks District Council	<u>AQMA No.11 (Westerham Town Centre)</u>	Nitrogen dioxide NO ₂	01/09/2006
Sevenoaks District Council	<u>AQMA No.12 (Sevenoaks Bat & Ball)</u>	Nitrogen dioxide NO ₂	01/09/2006
Sevenoaks District Council	<u>AQMA No.2 M25</u>	Nitrogen dioxide NO ₂	01/09/2006
Sevenoaks District Council	<u>AQMA No.3 M26</u>	Nitrogen dioxide NO ₂	01/09/2006
Sevenoaks District Council	<u>AQMA No.4 A20T</u>	Nitrogen dioxide NO ₂	01/09/2006
Sevenoaks District Council	<u>AQMA No.6 (M25-PM10)</u>	Particulate Matter PM ₁₀	01/09/2006
Sevenoaks District Council	<u>AQMA No.9 (Seal High Street)</u>	Nitrogen dioxide NO ₂	01/09/2006

Ashford has none listed.

MBC: Results of NO₂ Diffusion Tubes (2009 to 2014)

ATTACHMENT 3

In **bold**, exceedance of the NO₂ annual mean AQS objective of 40µg/m³

Our highlighting.

Site ID	Site Type	Within AQMA?	Full Calendar Year Data Capture 2014 (Number of Months)	Annual Mean Concentration (µg/m ³) - Adjusted for Bias					
				2009 (Bias Adjustment Factor = 0.84)	2010 (Bias Adjustment Factor = 0.85)	2011 (Bias Adjustment Factor = 0.92)	2012 (Bias Adjustment Factor = 0.79)	2013 (Bias Adjustment Factor = 0.88)	2014 (Bias Adjustment Factor = 0.88)
Maid 03	Roadside	Y	12	45	48	44.4	38.4	43.8	43.8
Maid 06	Rural	N	12	21	18	15.9	16.0	15.1	13.3
Maid 10	Motorway receptor	Y	12	34	34	32.3	29.3	34.5	29.8
Maid 11	Motorway receptor	Y	12	32	28	32.3	26.6	28.8	29.4
Maid 12	Motorway receptor	Y	10	32	28	32.3	26.5	27.9	29.3
Maid 14	Suburban	Y	12	33	36	33.1	28.5	32.5	29.1
Maid 18	Roadside	Y	9	29	31	29.4	24.6	31.4	25.4
Maid 19	Roadside	Y	12	28	29	28.8	25.6	27.1	26.8
Maid 20	Roadside	Y	12	32	33	29.4	29.2	31.6	29.7
Maid 21	Roadside	Y	12	35	37	33.8	31.8	39.8	39.9
Maid 22	Kerbside (U1)	Y	12	35	36	32.5	30.6	31.7	29.5
Maid 26	Roadside	Y	10	39	35	39	32.4	30.6	34.9
Maid 27	Roadside	Y	12	42	41	44.9	38.1	37.8	44.1
Maid 29	Roadside	Y	11	39	40	37.5	28.6	33.5	32.0
Maid 36	Roadside	Y	6	43	42	46.3	39.4	42.3^a	46.5
Maid 41	Roadside	Y	11	42	37	41.7	35.7	35.9	40.7
Maid 44	Roadside	Y	12	43	46	41.2	41.1	43.5	42.3
Maid 45	Urban Background	Y	11	20	25	22	21.1	22.3	17.7

Maid 46	Urban Background	Y	8	19	18	16.3	18.0	17.2 ^a	15.0 _a
Maid 49	Roadside	Y	12	41	41	43.1	39.4	43.2	42.4
Maid 50	Roadside	Y	12	27	28	24.2	23.0	24.9	22.9
Maid 51	Roadside	Y	12	44	49	44	40.5	46.5	42.9
Maid 52	Roadside	Y	12	48	47	48	42.0	46.0	44.7
Maid 53	Roadside	Y	12	59	60	60.2	53.5	61.7	50.5
Maid 56	Roadside	Y	12	35	30	30.4	27.7	27.6	36.8
Maid 57	Roadside	Y	10/8/8	38	42	39.9	36.4	41.0^a	38.7
Maid 58	Roadside	Y	9	94	90	85.7	81.0	92.3	86.6
Maid 59	Roadside	Y	9	87	71	70	61.5	69.8	78.3
Maid 63	Roadside	Y	12	40	39	40.7	35.5	35.6	38.6
Maid 66	Receptor	N	10/5/5		34	34.9	31.7	35.4 ^a	34.8
Maid 68	Roadside	Y	9			43.8	35.3	39.9	36.1
Maid 69	Roadside	Y	12			31.5	24.2	25.8	26.1
Maid 70	Roadside	Y	12			47.9	37.8	35.2	43.2
Maid 71	Roadside	Y	12			33.9	31.1	32.3	30.0
Maid 74	Roadside	Y	11			38.1	32.3	34.3	35.6
Maid 75	Roadside	N	11			37.4	30.6	31.0	32.2
Maid 76	Roadside	Y	12			30.5	29.8	28.3	26.9
Maid 77	Roadside	Y	12			22.4	24.6	27.3	24.9
Maid 78	Roadside	Y	11			24	26.3	26.5	27.6
Maid 79	Roadside	Y	10			27.1	26.4	30.0	26.1
Maid 80	Kerbside	Y	12				41.6	39.0	41.9
Maid 81	Kerbside	Y	11			84.8	87.3	81.7	74.8
Maid 82	Roadside	Y	9			37.3	39.2	42.1	42.3
Maid 83	Roadside	Y	12				20.1	26.7	25.3
Maid 84	Roadside	Y	12				26.6	31.9	29.5
Maid 85	Roadside	Y	12				25.4	31.0	30.0
Maid 86	Roadside	Y	12				33.2	37.9	39.4
Maid 87	Roadside	Y	6					34.9 ^a	31.8

Maid 88	Urban Background	Y	5					25.6 ^a	26.6
Maid 89	Roadside	Y	3					27.4 ^a	29.3
Maid 90	Roadside	Y	4					35.8 ^a	37.2
Maid 91	Urban Background	Y	5					-	19.7 a
Maid 92	Roadside	Y	1					(43.4^a)	37.3
Maid 93	Roadside	Y	1					(35.2 ^a)	30.2

In **bold**, exceedence of the NO₂ annual mean AQS objective of 40µg/m³

^a Results were annualised in accordance with the methodology laid out in TG(09) Box 3.2.

Data in brackets were provided for orientation only. They are short-term averages and although they were annualised they should not be compared to the annual mean NO₂ objective.

Air Quality and Planning Technical Guidance July 2011

“The Environment Audit Committee estimate that 50,000 people a year could be dying prematurely because of air pollution in the UK (Environment Audit Committee Fifth Report March 2010)..... The major source of airbourne pollution in Kent is vehicles and the year on year increase in the number of vehicles on the County's roads and continuing development across Kent is making the problem worse, offsetting any impact of cleaner fuels and technology. A consistent approach to tackling air pollution at a County level is required”. (Paragraph 1.1)

“A key principle of Local Air Quality Management (LAQM) is for local authorities to integrate air quality considerations with other policy areas, such as planning (1.7). It is therefore important for all local authorities to consider how they can best bring air quality considerations into the planning process at the earliest possible stage and it is no longer satisfactory to simply demonstrate that the impact of a development is no worse than the existing or previous land use on a particular site. Where developments are proposed within an AQMA or are likely to impact on an AQMA, mitigation measures should be considered as standard practice, particularly in cases where the development is new and does not replace an existing use. This is especially important where the development has provision for a large number of parking spaces, significantly increasing the number of trips”. (Paragraph 1.8)

Air Quality Planning Guidance December 2015 (Mitigation Options A and B)
Section 4 Planning requirements (Page 11 of both documents)

“If the air quality assessment determines specific changes in air quality due to a single development or from the cumulative effect of several developments; the following determinations will be made by the LPA (see Table 2).

- An overriding consideration will be to ensure that the air quality in existing AQMAs does not worsen by the introduction of a development and/or that there is no additional air pollution burden from a development(s) which could create new AQMAs.
- Each decision must be a balance of all material considerations depending upon the individual merits and circumstances. The weight to be given to the impact on air quality in the consideration of a planning application and the acceptability of proposed mitigation measures lies with the relevant local planning authority. Any agreed measures will be taken forward by condition where possible, or through the use of Section 106 agreements.
- Refusal of a planning application may still result if air quality impacts from a development remain, even after all reasonable means to mitigate the impacts on air quality have been exhausted.

Table 2 Planning requirements and outcomes. Magnitude of change in air quality	Likely requirements	Likely outcomes
Very High	Require evidence to show that mitigation will cancel out air quality impacts. If impact of development on air quality still very high = strong presumption for recommendation for refusal on air quality grounds.	Recommend refusal
High	Seek mitigation to significantly reduce air quality impacts. Mitigation to include reducing exposure through various measures, emissions reduction technologies and/or development redesign.	Recommend refusal unless significant mitigation measures are implemented.
Medium	Seek mitigation to reduce air quality impacts. Mitigation to include reducing exposure through various measures, emissions reduction technologies and/or development redesign.	Ensure mitigation is implemented.
Low/Imperceptible	Recommend the minimum mitigation for development scheme type.	Ensure minimum mitigation is implemented.

Air Pollution

Air pollution is derived from several chemicals and particulates deemed to be harmful to human health. The health effects of particulate matter are more significant than those of other air pollutants. PM is made up of a complex mixture of solid and liquid particles, including carbon, complex organic chemicals, sulphate, nitrates, ammonium, sodium chloride, mineral dust, water and a series of metals, which is suspended in the air. PM10 refers to particles with a diameter smaller than 10 microns and PM2.5 microns.

The following are therefore relevant to “air quality”:

- Carbon monoxide. This is the main harmful product. If the gas gets into the bloodstream it stops red blood cells from carrying oxygen from the lungs to the rest of the body. It can cause death.
- Unburned hydrocarbons. These make up the next largest harmful part of the exhaust. They are unburned gases from petrol. They can cause liver damage and even cancer.
- Nitrogen oxides. This is caused when nitrogen and oxygen in a hot engine react together. This can attack the breathing system. It can cause acid rain.
- Sulphur dioxide. When petrol burns some sulphur dioxide forms. This attacks the lungs and breathing tubes, causing bronchitis and other diseases.
- Smoke. This is mainly tiny particles of carbon. It makes everything black and grimy. It attacks the lungs. It can coat plant leaves, reducing their ability to make food by photosynthesis. It also disturbs the biodiversity of both land based and water based eco systems. Detrimental (This hazard is mentioned in various Defra reports on the Economic cost of Air Pollution.)
- As a substitute for lead in petrol two other substances were added: MTBE and Benzene. Both are toxic, carcinogenic and a risk to health.
- PM10 is the only particulate type monitored and reported in MBC. However, the particulates released into the atmosphere by vehicle engines are PM2.5, these are toxic particles. (The PM10 elements will be from brake linings dust metals, tyre rubber particles etc.)

The health effects caused by particulates include coughing, wheezing, shortness of breath, aggravated asthma, lung damage and cancer.

Air Quality Objectives

MBC’s consultants, Bureau Veritas, include in their Updating and Screening Assessment 2015 the following at paragraph 1.3:

The air quality objectives applicable to LAQM in England are set out in the Air Quality (England) Regulations 2000 (SI 928), The Air Quality (England) (Amendment) Regulations 2002 (SI 3043), and are shown in Table 1.1. This table shows the objectives in units of microgrammes per cubic metre $\mu\text{g}/\text{m}^3$ (milligrammes per cubic metre, mg/m^3 for carbon monoxide) with the number of exceedances in each year that are permitted (where applicable).

Pollutant	Air Quality Objective		Date to be achieved by
	Concentration	Measured as	
Benzene	16.25 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2003
	5.00 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2010
1,3-Butadiene	2.25 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2003
Carbon monoxide	10.0 mg/m^3	Running 8-hour mean	31.12.2003
Lead	0.5 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2004
	0.25 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2008
Nitrogen dioxide	200 $\mu\text{g}/\text{m}^3$ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005

	40 µg/m ³	Annual mean	31.12.2005
Particles (PM10) (gravimetric)	50 µg/m ³ , not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 µg/m ³	Annual mean	31.12.2004
Sulphur dioxide	350 µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean	31.12.2005